

Notes

1879 to 1887 inc.

I

Pages - 462

Natural History Notes

From 1879 to 1887 inclusive.

Vol I.

pages 1 to 462

Natural History Notes &c.

to 1884 inclusive

W. T. Davis

Tompkinsville

Staten Island

✓

chipmunk

In 1877 while in Sullivan Co N. Y.
I captured several chipmunks in a
rat trap, and on Aug 5 one of them
had two young, but killed them soon
after.

The summer of 1882 from the facts collected,
seemed to me at the time, to be a late
one, things being about a week or perhaps two
weeks behind hand.

There was a shower today that was something
to be remembered, as the rain came down in
an immense sheet, quickly filling gutters &
every thing in which water is conducted, to overflowing.
The water came down the hill which leads to
the ferry with such force, & in such quantity,
that nothing could hold it, & it ran mud
on a considerable portion of the dock.

June 26 = 1882

The "button ball" bush is an exceedingly good
place to find many butterflies. It is in
bloom on Staten Island about the end of
July.

See after notes
(The crops come once a
month)

There are usually about two well marked crops
of mosquitoes on S. I. during the summer. The

first of these comes about July 4th &
the second about the same time in
August. In 1882 it came on the 10th
of Aug.

- Ants* April 7 I saw about 20 ants today feeding on a piece of bread.
- Butterflies* April 8 Butterflies abroad
- Camberwell beauty* April 13 Camberwell beauties abroad.
- Carpenter bee* April 21 Found a few carpenter bees on the ground near the well, which the fine weather had evidently tempted out of their burrow just above.
- Humble bee* April 22 Saw a humble-bee flying about
- Phygadeuon* May 20 *Phygadeuon* *abbottii* came from chrysalis today, the pupa being out of doors.
- Carpenter bee* May 23 I discovered a carpenter bee's nest today which I cut open, and found it to be thirteen inches long; the entrance being about in the middle.
- Phygadeuon* May 24 A second *P. abbottii* came out today
- Cimex* May 31 *Cimex* *ulmi* emerged from pupa. The larva fed on the willow.
- Callosoma* June 5 *Callosoma* *scrutator* abroad
- Phanaeus* June 7 *Phanaeus* *carriex* to be found
- Erychia* June 8 *Erychia* *octomaculata* caught on grapes.
- June 11 A second *Erychia* *8-maculata*
- Elater* June 12 *Elater* *oculatus* abroad
- June 15 Caught a large fly in the act of catching a yellow butterfly
- Asterias butterfly* June 16 *Asterias* butterflies are abroad

3 1879

Philampelus

June 23 *Philampelus* *Satellitia* hatched. Pupa out of doors.

Philampelus

June 30 *Philampelus* *achemore* emerged from chrysalis.

Harvest fly

July 15 The first harvest fly

Sesia

July 27 The first *Sesia* ~~fulvipes~~ *Thybe*

July 31 I put some spiders in two jars about July 19th. One jar contained one male & two females, the other a ♂ & ♀. A short time afterwards on looking in the jar in which the three spiders were confined, I found that the male & one of the females had eaten their female companion. On looking in the jar a short time afterwards I found that the remaining female had eaten the male.

Spiders in captivity

Katy did

Aug 8 The first Katy did

Winged ants

Aug 15 Last Sunday I watched a lot of winged ants take their departure from home. They generally crawled up a grass stem from which to start. Of the many that I thus saw take their departure, scarcely one got out of sight before it was caught by a swallow. So out of the many thousands probably one or two only, reached the ground in safety to become the founders of other colonies.

Pelecinus

Aug 20

Pelecinus polycerator abroad This insect is found very often in Cedar woods.

Garter snake

Sept 1

My garter snake had twenty-one young today. They are about six in long and striped, much as in the old ones. Two were born dead.

Walking-stick insect.

Sept 8

At Denmark N. J. I found a number of walking stick insects. They seem to be very common there, particularly in thick woods. Several were taken of a green color, which is no doubt owing to their having recently shed their skins. (Some are green & some are brownish or straw color)

Oct 4

Hydrometridae

I watched some skates today in the brook. I noticed that in skating about on the water, they only use the second pair of legs to propel themselves. The other two are kept stationary. I threw a cricket in the water which one of them immediately caught and began to suck its juices. *Tamias alatala*, *r. antiopa*, & *Grapta* are abroad.

Vanessa

Grapta

Sea-anemone

Nov 1

I found a red sea-anemone on the shore. It is about an inch high when expanded, and eats or rather

5 1879

envelopes such pieces of clam &c as I happen
to give it. I think it is Metridium
marginalium

Helix

Nov 12 On Sept 25-1879, I put a common
Helix under a glass, where I left it until
Nov 9, when I took it out and put it in
water. Then it quickly showed signs of life.

Dytiscus

Nov 21 On the 9th a Dytiscus was found
on its back in the garden.

Land turtle

The land turtle that I have, did not
bury themselves until about Nov 18th

Turtle & worms

A turtle having died, I opened him
in hopes of discovering the cause. I
found about 15 worms in its stomach,
which probably, however, did not cause
its death. The turtle was Emys picta

1880

- 1880 -

Ants
cannibal

Feby 29 Ants are abroad I saw one in
the window. Camberwell beauties out and
a dung-beetle flew against a rail fence
3 specimens of Cychrus taken under
stones. Red-winged black birds are here

Cychrus

Red winged black-bird

Parter snake

Mar 10 The garter snake which had the
young, shed its skin today. It also

shed it on July 15-1879

Hemidactylus

Rana

March 21 I found the first specimen of Hemidactylus scutatum today under a stone. Rana sylvatica ♂ & ♀ were found in a pond.

Cychnus

red-shouldered hawk

Flying squirrel

Ambystoma

Lightning

April 4 Went tramping today with H. A. Wheeler. I found another *Cychnus* under a stone. H. W. got four red-shouldered hawk's eggs near Bull's Head & I a flying-squirrel. Also found two *Ambystoma* punctata in a pond.

There was lightning

Rhyssa

Bumble bee

April 8 An ichneumon (*Rhyssa*) was found in the garden, & a bumble bee on the 5th.

Pink cross

Common cross

Mouse's nest

April 11 Went to the woods with H. A. Wheeler. Wheeler found a fish-cross's nest with five eggs, which are much more pointed than those of the common cross & the bird gives a deeper "cad". I found three common cross's eggs later in the day, which were fresh.

On turning over a log, I found a mouse's nest composed entirely of

Chestnut-bird
Swallow
Snow

hair, and containing four young about an
inch long, all of which I carefully replaced.
In the first bud of our walk H. A. W. pointed
out to me a large chestnut-tree some six
ft. in diameter. H. A. W. saw a swallow.
It snowed slightly and was very cold.

Yellow ants
and
Aphidæ

April 17 About two weeks ago on turning
over a stone I found a nest of yellow
ants which contained a vast number of
Aphidæ, or *lucorum* as Huber calls
them. They were of a flesh color and were
conveyed away by the ants as fast as possible.

Butterflies
Cicada

April 18 The weather was exceedingly warm
and pleasant today; butterflies flitted
through the air and the hum of the
Cicada could be heard in every grassy
patch.

Owls
Squirrels
Crows
Hawk
Mice and
young

H. A. W. & myself came across two Owls
a grey-squirrel, and some flying ones. We
got some Crows' eggs and one red-
shouldered hawk's. In the top of a
cedar tree I found a mouse's nest
composed of cedar bark, mostly. When
I touched it the mother jumped out
and ran along the boughs to the opposite
tree. One of the little ones which

1880

tried to catch, fell down the tree and was secured by my friend.

Yellow ants
and
Aphididae
On turning over a stone I found a nest of yellow ants, the ones that domesticate the Aphididae. The nest was so situated that the roots of a neighboring tree passed through its chambers, and on these the Aphididae were situated. They were of a flesh color. A number of their eggs which are of a brown color, according to Hüber (ants being white) were at the bottom of the upper cells. These were, however, soon conveyed away by the ants.

Lycanidae
Saw one of the Lycanidae in a field.

Whip poorwill
April 20th I heard two whip poor-wills as I was coming home.

Passalus
April 30th I observe that Passalus cornutus produces sound by means of a few stiff bristles placed on its abdomen. There it rubs up and down on the edges of the elytra, thus producing a slight noise.

Baltimore Orioles
Cat bird
Whip poorwill
May 2 Baltimore Orioles & Cat-birds have made their appearance. Saw a whip poorwill in one quiet spot.

1880

Brown thrush

in the woods. I heard a brown thrush sing for the first time this year.

Carr wing

May 4th I found *L. maritima*, an earring, on the shore. They are in great numbers.

King fisher
and nest

May 16th Went to the woods with H. A. Wheeler. He found a kingfisher's nest in a bank where they had been mining iron ore. The entrance of the nest was about 1 1/2 ft from the surface of the ground. We took careful measurements and directions, and then began to dig down on the nest itself, which we found exactly at the bottom of our shaft. It measured about twelve inches each way and was composed of small fish bones laid without any regular order.

There were seven eggs, which are as large as those of pigeons, the main color being white with yellowish blotches which will wash off if care is not taken to prevent it. The chamber of the nest was about four ft from mouth or opening.

Bumble bee

I found a bumble bee in an

old squirrel nest. I do not think it could have been there all winter as it is too late for it to be hibernating.

Garter snake May 20 The garter snake mentioned in previous notes shed its skin again today

May 21 Stylax versicolor found on cedar. Papilio philenor abroad Got five swallows' eggs which were not very fresh. They were pure white. (White bellied swallow)

Papilio & Rhyssa May 31 Papilio turnus & Rhyssa on

June 6 Limnitis ephestion out. Macrodytes subspinosus common on black-berry

June 16 I took great interest the other day in observing a spider prowling about a small wasps nest about an inch and a half in diameter. He laid in wait at the opening of the nest for the wasps that came out, and then made a spring for them, but I did not see it catch any

Pretty soon the founder of the colony came out and ran after the spider over the surface of the nest, making a rasping sound as it went. The spider retreated to safe quarters, but only to come out again as soon as the wasp disappeared.

On Sunday June 13 H. A. W. and I went to the woods. We found the smallest land turtle which I have yet seen. Its measured carapace 3 in long; plastron 1 1/2

Land turtle
(see page 18)

June 18 H. A. W. gave me a splendid milk snake, length 3 1/2 ft

Milk snake

June 27 Tenias nicippe found for the first time on S. I. In one of the springs in the woods I counted fifty frogs & on one stone I counted twenty. The spring was very low on account of the dry weather. Found 2 of the red salamanders under a log. They are not common on the S.

Tenias nicippe

Frogs about a spring

Salamanders

June 29 I find shade frogs quite a distance from the water.

Shade frogs

Army worm - The army-worm is doing considerable damage about New Dorp this year. I received a few worms & the first one entered the ground on June 15th, the others a day or so later, on this day the first one hatched.

Frog and
slay to see
Sunday, July 2nd I have in confinement a spring frog and a shad-frog. It is quite amusing to see what they will eat. The spring frog has repeatedly eaten large hairy caterpillars and this morning when I put a stag-beetle in the box it snapped at that, but let it go again rather suddenly. The stag beetle crawls up on the frog's back when their exertions to get rid of him are quite amusing. I put in the box, several days ago, some cricket-frogs which have disappeared & I think the spring frog knows where they have gone.

Conocephalus
July 4. I heard a Conocephalus stridulatus for the first time this year.

Musquitoes
July 10 The mosquitoes are very thick this year.

One under
wood and
biting of them.

July 17 While strolling through the woods today about half past four o'clock I came to a lot of reddish brown ants measuring I should think $\frac{1}{4}$ in in length. They were carrying pupae in one direction, while others, without a load, were going in an opposite one. These I followed and soon came to a stone under which the ants disappeared. As the stone was a large one I could not turn it over. Coming from near the stone I noticed some black ants, about the same size as the others, each of which carried a companion. These followed one or two paces when they disappeared under a stone. This stone I was able to turn over, and soon discovered that the ants had just commenced to move into their new abode. I now turned my attention to the reddish brown ants and followed those which were carrying the pupae. They followed an irregular path for about 100 ft, where I found their underground dwelling. After inspecting it well I began to dig into it with my knife and though I did not reach the pupae I brought out a great quantity of ants which began to bite. The ants that came out were both

black ~~road~~. They were running about - picking each other up in their jaws, but I only saw the red ones handle the black ones in this way. I should judge from all the evidence that the red ants were slave makers, & that I found them carrying home the pupae belonging to the black ants, which I saw conveying each other to safe quarters.

Unlabeled
July 18. Visited the nest of ants spoken of above. Only saw one red ant, though the black ones were very numerous.

Pelicanus
July 24. Pelicanus polycerator abroad

Unlabeled
Aug 22. This day I watched a female Tricent make part of its boaring in a beach line. It boared about $1/10$ in per minute. I did not see her use her sheath for the purpose of putting the egg in the hole & am therefore uncertain as to whether she was boaring when I first saw her or whether she was putting the egg already laid in place.

Polistes
Aug 29. I find numbers of a species of Polistes hid^{den} away under bark & behind

1880

posts; the ... between the posts and the
fence. They seem to have nothing to do

mosquitoes

The mosquitoes did not last long but I
have never known them to be any thicker.

Snails.

Sept 2. ^(Gimms) Snails are very fond of sugar
and for insects.

Sept 16 I walked across the Island
to Lincolnville today & caught many
insects.

Land tortoise

Oct 31 Found a land tortoise whose plastron
measured $\frac{7}{10}$ of an inch in length & $\frac{7}{10}$ in
breadth on the meadows near South
beach. A small one indeed.

Nov 2 I went with E. Neilson today
to the north west corner of our Island
He found some new shells & quails

Gum tree is
a good place

Nov 8 Mr Grote informed me yesterday
that our native Gum tree is very
often tenanted by the larvae of Luma
Polyphemus, Cecropia, Insularis and Regalis

1881

Little

Hypsa &

Haden

Jan 19th Mr Grote says that the genus Hypsa only differs from Hadena in the shape of the wings.

A great

storm

Jan 22 There was a great storm yesterday. The rain which fell fast during the early morning froze as soon as it struck a solid body. The consequence was that the trees were covered with ice about $\frac{1}{3}$ to $\frac{1}{2}$ in thick making them both brittle & heavy. The wind then blew a gale from the south east, causing the branches to break off on every tree. Beside our house there is a large maple, some sixty ft high which has lost its top and most prominent side branches some of them being from 3 to 4 inches in diameter. The crashing was heard on every side and the destruction is ~~terrible~~ ^{very great}. My Grand mother said that though she had lived for over 70 years, yet she had never seen a storm equal to this in point of severity.

Crows

the

Jan 31st This winter being so severe, the crows are unable to procure food in the woods & a great number of them in the evening can be seen on the ice.

1881

in the bay. They seem to agree with the gulls for today I noticed some of each quite near on the same cake of ice. It looks very odd, indeed, to see the old crow jumping over the ice & pulling here & there at things in the water. They have become quite brave too, for today when the boat went near to ... on a cake of ice which rolled up and down with the waves, he stayed just where he was, hauling away at the same time at something in the water.

Feb. 1st This was a most perfect day quite warm & without a cloud in the heavens.

Lightning

Feb. 2nd There was considerable lightning today.

Snow

March 1st Though ^{was} there lightning yesterday, today the ground is covered with snow.

Yellow pine

Big chestnut

Red winged
black bird

March 13 I found some yellow pine trees today in the woods a species not common on the Island. I also visited the big chestnut tree & find by measurement that it is 6 ft in diameter. I saw a red-winged black bird.

1
Mch 28 On one of the pleasant sunny
hills which we so often find in the woods,
I came on great numbers of Cicindela
perisura flying about in the cedars.

Panassa antiopa is abroad

On placing the frog-spawn & tritons collected
today together in an aquarium, the latter
began to swallow the eggs on short notice.
I did not disturb them, however, and
suppose they are still enjoying themselves.
D. modestus was the animal in question.
The frog's eggs were those of Rana sylvatica.

April 10 - This has been a most beautiful
day, warm and clear blue sky, so that
the sun was not hid for an second,
but continued to shine

making man, birds, and insects,
rejoice at the brilliancy of the scene.

Gambrell beauties sported about
the scarlet-headed Rhus, their buzzed
by and the lazy locust basked in the
pleasant sunshine. Garter snakes were
plentiful in some localities and I put
three in my pocket, but only one reached
home, the others having got out on the way.
I let the remaining one go.

I took 2 specimens of Grapta progre.

Cicindela
(C. perisura)

Panassa antiopa

Tritons eating
frog's spawn

Panassa

Garter snakes

Grapta progre

April 17 The flies were not visiting the catkins on the willow.

Hedix

This last cold winter, mice or some other animals have killed many land snails. I found under some stones about 20 examples of H. ex thyridis, two of H. alternata and a few of l. dentata, most of which had the epidermis complete showing that they had not been dead over a year.

Blue & Copper

Thrushes

Cat birds

Sunday, May 8. I went to the N.W. part of the Island today with Charles Long. The day was perfect, and all nature was beautiful. Blue & Copper abounded in every glade, while Thrushes, Cat birds, Song-sparrows and a host of others sounded their notes.

Large ant hill

Cicada pupa

~~On the 10th of May, I went to the N.W. part of the Island with Charles Long. The day was perfect, and all nature was beautiful. Blue & Copper abounded in every glade, while Thrushes, Cat birds, Song-sparrows and a host of others sounded their notes.~~
A great many insects were taken & several new butterflies. An ant hill was found which was about $2\frac{1}{2}$ ft in diameter & $1\frac{1}{2}$ ft high.

Black snakes

May 12 Black-snakes are mating now.

Cecropia May 23 *Cecropia* moths are abroad.

muskmellons

May 24 I planted 15 hills of muskmelon yesterday & wish to see how long it will take them to come up, flower, ripen & become fit to eat. May 31, plants are up. Aug 28, picked two of the melons

Desanna

Sunday, May 27 I captured *Desanna cinerea*. Today, near Potterville

Blue tailed lizard

Decorative day May 31st Ernest Nelson & I went apiced. He says he saw a "blue tail" lizard on a log near the mill at Richmond. When I came up it was gone & could not be found, though we both looked for it; turning over stones &

Red eyed cicada

Sunday June 5 The last time I went to the woods, I found what I took to be the 17-year locust; ♀. Today upon going out I found them quite plentiful while the pupa skins could be picked up most anywhere. All the specimens taken by me (4) were males, while my friend took nearly as many more of the same sex. As many of them were wet, just having escaped

from the pupal skins I have no doubt that in a few days they will be more numerous. It is well to note that in 1877 they occurred on this Island by the million, felled trees and bushes being brown with their cast skins while the whirr of their flight and monotonous song could be heard on every direction.

Red eyed cicada Monday June 5 Found the red eyed harvest fly, in the garden on the grape vine.

Cascade Sunday June 1 - About one hour I counted 52 cast pupal skins of the variegata red-eyed cicada. variegata atlatlana brood

Perhaps these harvest flies belong to the species tridecem of Riley though the specimens I sent him were identified as belonging to the 17-year brood; yet it is little than those taken in 1877. ^{Frederick} Dr. ^{Holmes} says that Dr. J. was covered with Harvest flies in 1843 & 1845 which would go to prove that those of 1877 belonged to the 17-year brood. He also remembers seeing the red eyed Harvest-fly during the intermediate years.

If the individuals of the 17 year brood always appear simultaneously I cannot see how the present insects can be of that species.

1881

- Danaus*
Linnaeus
Lucas
Argyris
Elata
Thysa
Prickly pear
Xyletus
Sphinx
Philampelus
Elata
Osmodermia
Argyris
- June 15 Saw Danaus archippus, A perfect specimen of Linnaeus ephesianus was taken. I have taken but two specimens of this insect in ^(Kew's in later years) State -
- June 18 Sugaring is not ^{productive} yet -
- June 19 Argyris cybele abroad
- June 22 Elata imperialis abroad. It had just come from the pupa
- June Mr. Galt gave me an imperialis which laid upwards of 100 eggs
- Sunday June 26. I went to the woods today but it rained hard. This is the ^{8 summer} time, when but few flowers & insects are to be seen. Insects larvae are numerous.
- June 30 Species of Thysa are abroad.
- On May 29 I bought some of the joints of the prickly pear home, and gave them to my Aunt who placed them on a shelf. One of them soon began to sprout & is now in flower, which is of a beautiful lemon color.
- July 11 Xyletus robiniae was taken today, 5, Caught a Sphinx 5-maculata
- July 14 Philampelus pandora taken, first of the season
- July 16 Elata oculatus seems to continue long, for I found one in May (1st) & another a few days ago.
- July 17 Osmodermia scabra is abroad, as is Argyris idalia. I find on the red oak

no. 3 1881

X. robiniae many empty chrysalids of *X. robiniae*, a ♂ specimen of which was crawling up a tree just above the pupa which projected from a hole in the tree.

July 17 Upon running my net about my head just now I caught 87 specimens of that horrid fly with such pretty green gold eyes 3 black stripes on the back and a band of the same color across the middle of the wings.

Vanessa

Vanessa antiopa seen Larvae of *asteria* butterflies full grown.

Papilio

July 24 *Hydrellia* also probably ravages the Swamp or Spanish oak for I found today a cast skin of a pupa under a hole in one of these trees.

Calosoma

July 28 *Calosoma scrutator* abroad

Deicanthus

Aug 7 *Deicanthus minimus* abroad as a perfect insect

Aug 14. Today is perfect as regards sunshine, clear sky and the bug of animated nature.

Papilio

I have just taken *Papilio leucurus*, & *L.*

hesia

ephesion, while I saw a *hesia* on my way to Fresh pond.

Limnitis

Fresh pond

Temperature of Fresh pond (Silver Lake) 80° F. while the air is 84° 9.30 A.M.

Spring situated about 4 hundred ft. from pond in a westerly direction registers 53° F.

Pratt's Spring 54° F., sun full on it; other
spring just mentioned in the shade.

I visited Chelsea & Bloomfield around which
I looked for insects &c. Chelsea is a pretty
little place. I took several fine butterflies
one in particular being a black variety
of Parnus (Glauco) showing indications of
yellow in form of speckles over wings where
black does not exist in normal form.
It has a spot of yellow shaped \bigcirc in each
fore wing. G. mississippi & S. alope have
appeared. Oryzopsis idalia & A. cybele
abound.

On the way from Chelsea there stands by the
road side a large dead tree with several high
holders holes in its top branches. On looking up
I saw in one of these, a ♂ English sparrow
which looked decidedly out of place.

The thermometer registered over 110 when stuck in
the sand near Bloomfield.

Aug 21 I went to Pleasant Plains Station today
with B. Schwarz, & we walked out to the
vicinity of Krischerville. On the way home
we had to make a raft on which to put
our clothes & swim across Fresh Kill, where
the bridge is broken down. Catocala is
common in the woods at night.

70, 44-1
There are pleasant days now though there is not enough rain, which causes my meadow plants to look sickly. Besides the want of water there is an overabundance of squash bugs which have done much harm, killing several vines.

Aug 31 I caught this evening Headena confederata
Headena confederata & Agrotis c. nigricans for the first time this year.
Agrotis Philaenopus achem Sphinx 5-maculata & S.
Philaenopus lineata are abroad.
C. terra Sept 3rd C. terra abroad

About Orthoptera It might be well to give here the time of appearance of the night singing Orthoptera as I now remember them. First of all sing Oecanthus with its pulse like sound - this is about July 10. Before this insect becomes very numerous Conocephalus ensiger appears, and with ik-ik ik, continues - for a short space of time enters low bushes & particularly gardens. Before this begins to die out (about Aug 25) appears a species of long legged Phylloptera & the Katie-did. About this time also occurs Phylloptera retinere.

Sept 4 I found today two horned spiders. The abdomen being decorated with 10 spines, eight
Spider

of which are of considerable length

Sept-11 Copris carolina can now be found
On an elm I found two full grown caterpillars

Aplous 4 cornus of E - 4 cornus

Sept-21 W. Page and I went to ~~xxxx~~ the
cliffs at Prince's Bay. I think they must be
over 30 ft. high in some places, having for the
most-part perpendicular sides. The land is fast
washing away here, & in front of two cedars
that now stand near the bank, the old men
of the neighborhood used to play ball in
their younger days.

Sept-28 6 P.M. I notice many ^{which breed} swallows
flying southward. Their flight is unsteady as
if they were catching insects on the way.

October 2nd. I went to Keyport N. J. with Messrs
Benton & Redden. This part of the Jersey
coast is made up of sand & silica pebbles
^{or yellowish} stained red by iron. Concretions containing much
iron are common. There are some very peculiar
trees here; hybrids between the willow & black
oaks, & the wild linden has its southern ^{the} limit
about Keyport. The crickets here are
very light in color, probably owing to the sandy
character of the soil.

Calosoma Oct-3 Calosoma scrutator is still abroad

7 1881

Oct 9 It is often very amusing to see how animals are of the same mind about their various affairs. Today I was much pleased with the friendly way in which five geese were drinking together as they stood on the edge of a small puddle. E. one has observed sparrows bathe together, & crows visit the same field in company, but when you meet a drinking party of geese with their long necks, and a quack after each gobble of water, you meet something calculated to make you smile if not laugh.

Anomia

Oct. 15 *Anomia xylina* is abroad in great numbers.

Hyla
pickeringii

Oct. 16 *Hyla pickeringii* can now be seen in great numbers in low ground. My companion, C. Butler found one pretty little fellow in the deserted hole of a carpenter bee.

Hemidactylium
eupatoriæ

We each caught a *Hemidactylium scutatum* and Butler took *Eupatoriæ claudia* in the Clove valley.


Scaphiopus

Nov 4 I found in my turtle tub today a specimen of *Scaphiopus holbrookii* (This ear Hyatt & Tompkins are now St. Marks, FL)

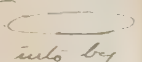
Nov 24. Of late I have found many fossils on the shore at New Brighton. They all came from one large stone which belongs to one of the Northern groups - Devonian. One specimen of Orthoceras pelops is 10 1/2 in. long & almost 4 in. at broad portion.

Dec 12nd 1881 The weather is so warm that water does not freeze when left out of doors at night. It has been so for several days, though before the ice would bear the weight of a man.

Last Sunday (a splendid day) I walked along the shore to Crook's Pond (Great Kill) finding many interesting things. I picked up what I judge to be three kinds of native sponges & a new shell, Solecur carabaeus. The peat beds past New Dicks have an very extensive. Below the bank which exists in some places, where the peat reaches out into the water at low tide peat "boulders" may be found, which I do not think ever get washed up on the shore above the bank on account of its shape & their water soaked condition.


 The peat has about this dip

76
Peat at Crook
Point

Many of these "boulders" are shaped very curiously. I noticed one in particular of a club shaped form  In some places these peat banks are eaten into by the sea, up which fishermen throw water-rubies at low tide (at high water they are covered) with a road, breaking off pieces of peat & rolling them about as I have described.

Crook's Point is very interesting, there is a great deal to be learned there. It is covered with sand dunes like the country about Bloomfield. The wax-berry is the highest-shrub growing there. Cedars are numerous, & several poplars have been planted which seem to do well, and the black plum abounds.

August 5th 1882

Aurora There was an aurora last night which shot long points of electric light nearly to the zenith. But the most remarkable thing I saw was a  cloud - this shape.

It spanned the heavens like a rainbow crossing the milky-way at right angles in the zenith. Its direction was from ENE to WNW (I used a compass). The cloud had the appearance when looked at in sections, of a comet's tail. It afterwards broke up in transverse sections



1882

1

Feb 17th 1882

Scopelosoma

that this
 Last night I caught a moth which
 corresponds with Mr Grote's Scopelosoma
Worcesteri. It was attracted by the light
 in the room and came fluttering against
 the glass. It is a bright specimen and
 looks as if it had just been hatched
 from the chrysalis.

Song sparrows
Blue-birds

The past few days have been
 most perfect ones of sunshine and
 warmth. Yesterday I heard a song
 sparrow, and blue birds were continually
 calling their pleasing note.

clouds & rain-bow

At half past four P. M. I saw
 something which was entirely new to
 me, over in the west. The clouds
 were arranged about this shape:-
 with the setting sun in the center.
 Several of these clouds had rain-bows
 on their Southern edges and two in
 particular were very noticeable.

In the East there was also a
 very odd cloud which looked
 as much like a big piece of strati-
 fied rock as any thing else, (as
 this cloud was separated from
 all others by a considerable space,
 it became more prominent than
 it would have been if otherwise placed.

Lightning

Feb 21st 1882
It has rained all day, Towards night
there were vivid flashes of lightning and
loud thunder which would have done
credit to a hot Summers evening,
instead of a cold February day, See
April 4th 1880.

Chipmunk

Yellow bird

Robin

Sunday Feb 22nd 1882
I went hunting today, but did not
get much on account its being so
cold. Yellow birds, robins & chipmunks
were out. I also saw a little bird
(eating litch seeds) which sang as nicely
as any thing I have heard. As it
was up in a high tree I could
not see it very closely & do not
know what name to give it.

Maples

March 4th 1882
The silver or white maple is in
bloom and her red sister shows
signs of activity. E Nelson says
that he saw a wasp flying about
today.

Wasp

Sunday March 5th 1882
The first portion of this day was
exceptionally pleasant, and I went
to the woods without over coat in warm
and balmy air. Towards night, however,
it grew cold and stormy, and about
4 P. M. it rained.

In the morning the birds were
enjoying themselves to an unlimited
extent. The robins were making a

Crows

great racket over their proceedings; while the crows, in a quiet valley, where they had things to themselves seemed to be bating over the nesting season, and were very noisy about the generally silent business of choosing mates.

I heard over in a swamp some distance from where I was standing, the first notes that have greeted my ear this Spring, from the little Hoyle Pickeringii.

The Stink Cabbage now sticks up its spathe through the soft mould when it grows and gives forth to the air the scents which mark its being.

I found several insects, and ~~the~~ Passalus was common as usual, in rotten wood.

March 16th 1882

For the past several days it has been very cold, and this morning the snow lay several inches deep. So far there has been as much winter in March as there was in February.

Sunday March 19/82

Many frogs and turtles were out enjoying themselves; while blue birds robins and song sparrows were every where to be seen and heard.

I also observed a beetle crawling

Passerina

on some leaves, and two V. White butterflies are skimming themselves near the highest point of the island. These are the first I have seen abroad this year.

Butler says he saw one of the Piridae some time ago East of the highest point there is a pleasant little road and some desolate hills covered with old wood, stumps, & logs I would judge that insects would be very plentiful in such a locality during Summer and late Spring.

Sunday March 26th 1882

I went to Summerville, Old Place & vicinity today, but I did not find very much in the natural line. I found some beetles and a number of "Neuroptera". About midday I saw a moth fly, but in catching as I had ~~not~~ no net, it was spoiled. It was a Tortrix.

Sunday April 2nd 1882

I went specimen hunting today with Butler. Before I went to his house, and while I was in the woods on the north side of Fresh pond, it began to rain. I remembered a hollow tree in the locality and began running about to look it up; but did not find

it easily to the evident amusement
of the people under shelter on the
other side of the pond. They did
not know what I could be doing
in running from one tree to another
in a mad sort of way. However,
I eventually ran through some bushes

into a large tree, and sat down
and began to eat crackers. In
about 20 minutes it cleared off
a little and I saw some of the
party come down to the waters edge,
just opposite to where I was, and
pushed the tree into which I had
disappeared. They had a boat
and as they were about to get in
I left my abode and went after
Butter.

Today was warm, in fact hot.
We caught a T. Lecontei ("little brown
snake") in Buttrick's mill pond, and
a "ribbon snake" in one of the
adjoining ponds. We let the latter
go, however, as its skin was injured
in catching, though the snake was not
disabled. We also saw some of those
ponds many cricket-frogs, and a Pseudacris
was later on a stick, where it
had crawled near the surface to
sun itself. Dragon flies were out there
or four being seen, while V. autopa

"Little brown snake"

"Ribbon snake"

Cricket-frogs

Dragon flies

Vanessa

sported in the sun shine, accompanied
by a lazy dung-beetle or two of
the genus Peltes.

Molneda

Lycena

A *Molneda* flew into my hat
and L. Linia into Butler's. If we
had had a net many more insects
would have been captured.

Pist. leuc.

A fine large fish hawk was
also a very interesting sight as it
flew into the air with a scream
and dashed into the water. The

Catkins

Heptacris

willow and alder catkins are fully
out, and the former are now being
visited by flies. No *Heptacris* could
be found in bloom.

In the latter part of the day
it thundered and rained again
so I got into another ^{one} on my way
home, where I was obliged to stay some
time.

Sunday April 9th 1882

I went to the fields
woods again today, but it was
cold and unpleasant. I saw
quite a number of the little red
spiders which are so common in
straw-berry beds sometimes. I also
found two large ^{fly larvae} ~~larvae~~ under a stone.
I have put one in alcohol. In a
small tree which I broke open
over numbers of a large species
of termite with rudimentary wings.
I found some plants for my
Aunt, among which was a specimen

P. leuc.

L. leuc.

Termite

Saxifrage

Callitriche

of Saxifrage which is the first
I have seen this year in bloom.
The yellow callitriche are now fully
open

April 10th 1882

Snow

Though yesterday wasn't pleasant
today is still worse, for the ground this
morning is covered with snow, and
only here and there on the grass
can the dead weed stems be seen
above the white field.

Sunday April 16th 1882

Callitriche

Hamamelis & Gleditsia

At last it is warm enough for
insects to come out in plentiful
numbers. C. rufa, V. antiope &
Gleditsia can now be seen flying
about. I noticed also a number
of numerous flies about a
recently cut birch stump. Cabbage
butterflies are also abroad; I saw
several and caught one.

I climbed up a high ^{poplar (C. grandifolia)} tree, with
rough or granulated bark, and
got some beautiful catkins of a
maroon color.

Spring beauty

The Spring beauty is now
in flower.

Monday Apr 17th 1882

Last night there was a brilliant aurora. I did not see it as I went to bed early.

LIGHTS IN THE SKY.

An arc of brilliant light spanning the horizon from the north to the west at about 10 o'clock last night was phenomenal because of the lateness of the season. The altitude of the central portion of the arc, of the Northern Streamers (Aurora borealis), was about ten degrees. The colors, from brown to violet, were more brilliant than are usually seen in the temperate zone, and resembled very much the aurora seen in the Arctic regions in August and September. Above the arc the stars shone brilliantly, but below it they were seen as through a thick fog. Toward midnight, the lights changed their formation and at times seemed to shoot up in rays. When they appear in the late winter or early spring, they are generally the forerunners of colder weather.

Soon after midnight the sky presented a magnificent appearance. The display became corrugated, and shortly before 1 a. m. the nucleus was directly in the zenith. The city seemed enveloped in a circle of vertical fibres, more or less wavy, reaching from the horizon to the zenith. A large number of people stood on the pavements or in the parks, and others leaned out of the windows witnessing the grand display. The aurora was also accompanied by marked disturbances both in the direction of force and terrestrial magnetism. At the Western Union Telegraph office it was stated that these disturbances were first felt about 10:30 p. m., and at midnight the effect was serious, the wires at all points being obstructed. It was stated also that, with the exception of the cables to the northward, the telegraph had not been affected by the aurora before for more than a year. At 1 a. m. the waves of the aurora began to dissipate, but the scenes in the heavens continued brilliant with the varied tints and colors.

THE DISPLAY AT BALTIMORE.

BALTIMORE, April 16.—The display of auroral lights to-night is unusually brilliant, extending from the horizon to the zenith and covering almost the entire northern hemisphere.

CARMINE, BLUE AND WHITE.

POUGHKEEPSIE, N. Y., April 16.—There was a splendid display of aurora borealis to-night. The shafts ran from the northern horizon to the zenith, and were in colors of carmine, blue and white. At midnight waves of light centred at the zenith, advancing and receding for several minutes.

Sunday April 23rd 1882

I went walking with my old friend H. A. Wheeler today. Among a number of Lycana Lucia's which I caught is one in which the spots on the under surface of the secondaries are run together forming an irregular black mark.

Crows have now laid their eggs. We got some blood root flowers in the valley which bears that name.

April 29th 1882

The cherry has now a few white blossoms, and the willows are green.

Sunday April 30th 1882

Richmond valley was the field of battle today. I went with N. L. Britton. Many butterflies were abroad.

Hesperians and Lycanids being in numbers, Therla angustata was taken (three specimens). V. Hammon is also flying about. Swallows were everywhere.

Cherry blossoms

Willow are green

Hesperians

Therla angustata

Pyramis tincta

Swallows come

Sunday May 7th 1882

I went to Watchogue today with
Chas. Butler.

Before starting
for that place, however, we dug out a
Kingfisher's nest ^{near the pond} which contained three
eggs. The nest was about five ft.
from the mouth and was quite a
"dig"; but the sand was loose and
after the labor of half an ^{hour} we got the eggs
(see Apr '80). If we had left the nest
undisturbed longer the old bird
would have undoubtedly laid seven

or more eggs, as these were very fresh.
An Orchard Oriole was seen near
Butler's Head. L. Luciae is becoming
less common than it was a week
ago, and the specimens taken

were rather beaten. Phoebe Augustus
was caught at Watchogue, P.

Rapal was abroad in numbers
while a stray C. atalanta might
be seen now and then in company
with his true loving relation V. antiopa.

On the way home a Swamp-oak
was observed which looked covered
with yellow fruit. They were nothing
more, however, than thistle-furcs,
but the beauty of the scene was
something to be remembered. The
Brown Thruster is singing, and
the fisher cut-bird wags his tail as
he did last fall when I saw him
last. I should also state that B.
took P. cornutus.

I saw Bufo ~~americanus~~ ^{foveolatus} for
the first time this year.

Kingfisher's eggs

Orchard Oriole

Lycium

Phoebe Augustus

Rapal

C. atalanta

V. antiopa

B. cornutus

Bufo

"June Bug"

8 P. M. May 9th /88

A "June Bug" just flew in the window. A species of Phryganidae

and a moth have paid a visit to the cyanide bottle.

Sunday May 14th /88

Pear in leaf

We rained all day. The pear and some other trees are out in leaf; the native trees, however, are not so forward.

Sunday May 21st /88

A party consisting of Messrs. Budden, Whitbur, Hootch, Britton, Wheeler and I, went to Kreischoelle today. Besides having a very good time we found many interesting things. The Botanists found several plants new to the Island, while I caught a few interesting insects.

We found a beech tree of a very peculiar growth. We cut it down with a geological hammer and a big jack-knife, and intend putting it in the room of the U. S. A.

It was carried by us in turns, through woods in some places, for about four miles to W. Mercereau's house.



This drawing represents the tree as I remember it. They ~~all~~ pronounced it to be one of the most remarkable growths ever seen by any of the party, and there was some

dispute as to whether the branch had grown up or down.

Water snake.

In a brook we found a water snake. I put my hand in the water, caught the snake and threw it upon the bank, when it was quickly secured and put in a bag, which I had along awaiting such a use. Though I did it quickly, yet the snake found time to bite, ~~between the~~ and the result was a hole in my finger. It did not amount to much, however, and as I have had them do that sort of thing before, I have got somewhat used to it.

We also visited the marl beds, which are very curious. In one place some one had stuck a crow-bar into the clay and withdrawn it. Through the hole thus left a little stream of water issued making a little mound with minute streams down the sides.



It looked something like the drawing here made. It was about $1\frac{1}{2}$ ft in diameter.

Sunday, May 28th 1882

Miscellaneous

Found A. subcuneata ♀ & ♂, also another Bombycid of which I do not know the name. Also caught two crows, the nest was

Cyphus

etc

in a bush tree, and Arthur climbed up and put his hand in the nest taking hold of one of the eggs, where the other two flew out. I secured one, but the other went the opposite way, and could not be found when looked for.

Papilio phileas
" *astorinus*
" *turnus*

Papilio phileas, *P. astorinus* & *P. turnus* were seen. *Lycaena Americana* is also abundant. *Comptosia* is the only blue seen now, with the exception of rare species.

Libellula

Libellula 3-maculata was caught in our imperfect state. The coral & sulphur ^{colored} ~~sun-dried~~ locusts are also flying about in open places.

Observed some very curious ribbon varieties of the pink and birds-foot violets — they were pure white.

Sunday June 11th 1882

I have been to the woods many times of late, twice during the week and last Sunday. On the 4th I did not get far when it began to rain hard, so I came home. I got some ear-wigs, which are very plentiful on the shore at Camp Washington. I sent them to Mr. Scudder at his request. On one of the trunks during the week, I found in a foot-hole, a native mouse and *Hylea varicolor*, along with some beetles.

Ear-wigs

- Saturnia* June 15th 1882. *Saturnia* ~~70~~ hatched from cocoon, ♂.
- Parthenos* *Parthenos nubilus* taken at sugar
- Ceratomia* June 19 *Ceratomia quadricornis* taken on elm
- Papilio* *Papilio turnus* & *P. asterias* in considerable numbers
- Aegirion* A most beautiful *Aegirion* flew to the light in the window this evening. It is *Egeria aceris*
- Calosoma* *Calosoma calidum* has been more plentiful than for several years past.
- Cimicex* June 20 *Cimicex ulmi* abroad *Phyrus abbottii*
- Phyrus* hatched flying about the grape.
- Ceratomia* June 23 *Ceratomia quadricornis* hatched from chrysalis
- Callosamia* June 26 *Callosamia promethia* out; saw ♀ & ♂
- Rhyssa* *Rhyssa abrita* has appeared.
- Eacles* June 28 *Eacles imperialis* hatched from pupa
- Sphinx* June 30 *Sphinx 5-maculata* caught flying about honey suckle
- Glypta* July 3 Many dragon flies & *Glypta progne* taken,
- Papilio* also *Argynnis cybele*. *Papilio troilus* plentiful
- Cynthia* July 7 *Cynthia lammia*. *C. huntera*, & *C. abalala*
- Vanessa* seen. *Vanessa antiope* abroad.
- Phyrus* July 10 Larvae of *Phyrus abbottii* (full grown)
- Golden-crown Thorn* found today. On the 4th I found the eggs of the golden-crown thorn
- Argynnis* July 16 *Argynnis idalia* abroad. *Neonympha canthus*
- Neonympha* seen
- Cicada* July 17 Heard *Cicada* ~~frumosa~~ a few days past, the first of the season.
- Hemiptera* July 25 *Hemiptera* & *Calocata* have appeared at sugar
- Calocata* *Argynnis idalia*, *cybele* & *J. lammia* abroad on the 25th
- Argynnis* *geronius*

1882

- Ctenocephalus July 16 Ctenocephalus crassus first of the season
- Dumetia July 18 Dumetia subleppus abroad
- Limnitis July 30 Limnitis apollonia, L. misippus, Limnitis
neony apollo
- Junonia canthus & Junonia larinia abroad.
- Scantus Aug 2 Scantus canthus undulatus
Papilio Aug 6 Papilio trialis calceus & larinia abroad
Phylloptera Aug 29 Phylloptera retinens, Phylloptera
Platyphylloptera canthus & Phylloptera curvicauda.
Phaneroptera
- Papilio Aug 30 Papilio crassus seen as near P. trialis
- Cicada & P. larinia. Cicada in great numbers.
- Papilio Sept 4 Caught Papilio crassus.
- Pieris protodice Sept 6 Pieris protodice taken on shore at
Camp Washington & the first specimens I
have captured
- Junonia Oct 21 Junonia larinia out. Bambus clinging
to branches in torpid state, 3 specimens.
- Verpa cabro yet flying

Colorado

A collection of the common Colorado potato beetle, which I made this year for the purpose of seeing the variations occurring among them, show them more numerous than I had at first supposed. Out of several hundred I selected 10 in each of which the spots on the thorax & head differ from the others. This beetle, I think, may be taken as a fair average in point of conformity to a general type.

VISITING SCIENTISTS.

Rocky Mts. News. Denver, Col.
Prominent Geologists on a Collecting
Tour in Colorado.
April 4, 1882.

Prof. N. L. Britton and W. G. Davis, of a special surveying party who have been collecting fossil specimens in various parts of the new west for a geological museum, arrived in Denver yesterday and registered at the St. James. Prof. Britton is acting as a d to the government geological survey, and Mr. Davis and others have been acting as his assistants. The party have been on the Union Pacific road as far as Evenstown, Wyo., and have collected a great number of plants which have been seen by Dr. J. S. Newbury, of Columbia college, N. Y. They propose to continue the work in those parts of Colorado where fossil plants are most found, such as localities around Golden, Golddust and Floresant. The new west has been found to be quite rich in fossil remains. Belts of rocks on the eastern and western side of the Laramie range show many fine specimens of fossil plants. The collections made by the party show that in former times this whole western country was covered with vast forests of trees, allied to those of the present day but of different species. These forests rivalled in extent and grandeur anything known in the present age. These fossil leaves and ferns are found, for the most part, in shales and sandstones accompanying coal beds.

The coal of the Rocky mountains is composed in a large degree of the debris of these ancient forests. The collections thus far made by the party have been confined to rocks of the tertiary age, but similar fossils exist in the rocks of the preceding geological epoch—the cretaceous. These fossils of the cretaceous period are found in the sandstones of the Dakota group—so called, of Kansas and Nebraska. These cretaceous plants are of great geological interest, as they indicate the first appearance of the flora which now covers the earth's surface.

Prof. Britton showed to THE NEWS reporter last evening a box filled with very fine specimens from Floresant. They consist of leaves, ferns and the bodies of small insects imbedded in soft mud, which afterwards hardened into good sized pebbles. These leaves belonged to small oaks and other trees of a species closely allied to the pine. The leaves are found in a very perfect state. The Floresant fossils also exhibit leaves of sassafras, walnut, buttonwood, and other trees similar to species of the present day. The collections are sent as rapidly as made to Dr. J. S. Newbury, professor of geology in Columbia college, N. Y. and well known in the West as a mining expert. They will be sent to him for description and classification and then forwarded to the National Museum at Washington, D. C.

Prof. Britton and his men have now been at work a month. They will not be able to examine the coal regions near Trinidad, as they complete their labors by the fifteenth of the present month. Another member of the same party has been engaged in fossil hunting on the upper branch of the Missouri river.

Platysphallium

Papilio

Coolias

Acrasidium

Prox

Funaria

Siphon

Hemiptera

Time in which various insects showed no signs of life when put in the same Cyanide bottle.

1	specimen	<i>V. vulgaris</i>	about	15	seconds
2	"	<i>Bombus</i> sp.	"	15	"
1	"	Carpenter bee	"	18	"
1	"	<i>Amnephila</i> sp.	"	30	"
1	"	<i>P. aserian</i>	"	1	minute
1	"	<i>M. tharso</i>	"	45	seconds
1	"	<i>rufae</i>	"	45	"
1	"	<i>L. ephestion</i>	"	33	"
1	"	<i>V. antiopa</i>	"	10	"
1	"	<i>M. domesticus</i>	"	25	"
3	"	<i>C. rufidis</i>	"	1 1/2	minutes
1	"	<i>O. vulgaris</i>	"	1 1/4	"
1	"	<i>C. dissimilis</i>	"	1 1/2	"
1	Spider		"	2	minutes

Experiments made since the above have convinced me that it is not a well marked fact that certain insects belonging to the higher orders will die when exposed to the effects of Cyanide before those not so highly organized.

in the Coast Range

Saturday, Nov 11th 1882. I rambled today. Nature

is certainly very beautiful at this season every step
bringing to view some new object for admiration.
May, used snails. I caught a hogweed snake & some insects. One
of the dragon flies captured was depositing its
Dragon fly eggs when observed & at one time was entirely
laying eggs under water. (Aeshna) [This in Clon Valley, in a spring]
Nov 1st. The chestnuts laid in considerable
numbers on the ground today. Their abundance
was caused by previous days of wind & rain.
Snakes Several snakes were abroad in the sun, in
the warm nooks.

Crowd died My poor crow "Poppy" died today of some lung
trouble.

Nov 14 I have been out in the meadows
several times of late, in fact whenever the
weather was good, for we have had much
rain & cloudy skies since I came home from
the West. On Election Day (7th) with some
friends I went to South Beach to look for
natural objects. I found Anomia glabra
perfect that is having the two valves joined
together. They are not commonly found so on
our Staten Is. shore. Poreo varialis, its structure
&c., also the egg cases of Pyrosoma, interested
interested us.

In coming home we struck across the
salt meadows which were very wet after 20 inches
rain. The consequence was that we had much

amusement & considerable mud & just feeling
horns, we all enjoyed it and that was
enough. There was one place in particular
where the "road" crosses a very "bad" patch
of meadow - wet at all times but at this
particular period in a horrible condition.
After throwing down some hay which we
brought from a distance & two cedar branches
(all together reaching about half way across)
we started out & without exception went in
up to our ankles in mud & water.

Colias

While varieties of Colias philodice now.
Nov 30 Roosters crowing at 10 P.M.
Answering one another.

I have made during the past week 58
insect boxes at a cost of about 4.00 I paid
3.90 for the lumber, which was planed &
sanded as I wanted it. All that is wanting
now is about 116 panes of glass, which I
will get during the holidays.

Dec 23- I got my glass for \$7.00 (74 a
sheet), & have arranged a large portion
of my insects. I took the butterflies to
the Natural Science Association, because I
thought that they would be useful there & if
either portion of my collection should burn
I will have the remainder to console me.
Oh compensation, I have also increased the size

Insect boxes.

Christmas 1882. To the South Beach. Heli's
aspera in the stem, probably from ballast. Also
Hippa talpoida.

Thursday Dec 28. It was so warm today that
I sat on a rail fence, near Bard Arn, in the
sun for over an hour, having nothing better to
do. When I came home I wrote the following
Lines to
S. N. H.

They say that he is growing old,
That his hair is grizzly gray;
They say he deals in posts & stones,
And that he cuts our woods away.

Of indeed have I noticed
When passing o'er some desolate ground—
The old black weathered stumps of trees,
Which they say that he cut down,

Of indeed have I noticed
Great fields where naught was seen,
Save here and there a bramble
Which was not even green.

He thinks he called it "improvement",
But I'm not sure what he said,
For the man who was my informant—
Had surely "lost his head".

He talked some gibberish nonsense
About building lots so fine,
When houses twenty by thirty feet
Could stand all in a line.

He glories in the absence of
All but nature's ground
He glories in the dismal scene
That man had spread around

I met another on my way
A man of the better sort
And asked if he could say,
"Why all this ruin was wrought"

"Ah me" — said he
As his looks were cast around
"It's an agent's work I am told
And he's done the owners brown"

"The worse, they will not own it
For nature's charms have fled —
Who would live where the grass is brown
And the trees that were, are dead."

They say that he is growing old
That his hair is grizzley gray —
O! shepherd of the peaceful fold,
Do take this lamb away.

Dec 29 To South Beach. Three new specimens

Helix aspersa of the Eng. snail, *Helix aspersa*, one of which has a membrane stretched across its mouth but I think the animal must be dead as there is a small hole in the shell.

1883

1883 -

Jan 4. Of late L. Sawyer & myself have been hunting *Cecropia* cocoons together. On New Years day ^{we} went to the upper part of N.Y. Island and got nearly 300 cocoons - mostly *Cecropia*.

Jan 15 went to the N.Y. Produce Ex. as above.

Jan 24 About this time of the year the edible *Edible crabs* crabs is plentiful on the South Beach, east up by the wares.

July 25 The song sparrow has been singing for some time now & blue birds can be heard most every day.

Mon 4 (Sunday) Some friends found *Robin* implements *Robin* across heads in the fields near the *Billy* house today. The persimmons are fine.

Persimmons still, we got a number off of two trees. Sunday Nov 11. I went alone to South Beach. Within a yard of the water near the mouth of New Creek, I found a small (2 in. long) Salt water terrapin (*M. palustris*). It seemed to have just come out of winter quarters & was in consequence not very active in its legs.

51
Some varieties of the common edible mussels
and some crabs made up the rest of my
day's collection.

Grapta
progne
Vanessa
Sunday, March 18. In the Clove Valley; *Grapta*
progne; two specimens. Beetles, spiders &
flies also out in numbers & my Aunt
Vanessa says she saw *Vanessa antiopa*.
Ah! these warm & pleasant days.

I have collected some sea weeds on
the shore & late just to see how I could
freeze them. They turned out fairly well
& are certainly very pretty.

Littorhane
H. curvica

March 19, *Littorhane unimoda* & *H. curvica*

March 23 The Salt-water Terrapin, which I
found on the 11th was frozen solid today
in the vessel when I had placed him. On
taking him out of the ice he moved his
legs & a little warmth would soon have
caused him to walk off.

Vanessa antiopa
skunk cabbage,
Red winged
black bird.

Sunday, March 25. To Bull's head locality. *Antiopa*
butterflies. The skunk cabbage is up. Turtles
fish & frogs are all abroad & the red-winged black
bird has appeared.

March 30 It snowed last night, & this morning,
very hard. It is now (evening) about 6 in.
deep, but the weather looks better for the
morrow.

Calosoma
viridic

Calosoma vilcoxi caught April 1.

1883

gray squirrel April 8. Smoked a gray squirrel out of a hollow tree.

Moon

A new moon tonight. While the lower portion (black in the f's.) was brightly colored, the rest was also plainly visible.

Lycena

Sunday, April 15. At last the little blue butterflies have come. I caught one today on the hill back of the mill pond.

Coleman
Cissidolus
Hepatica
Saxifrage.

Coleman inda abroad also the purple tiger beetle. Liver leaf in bloom last Sunday & today I saw the first Saxifrage in flower April 18. The following was written to the skull of a horse, found in the woods near the Little Cloon Road.

Addressed to the Skull of a Horse.
The meadows are green again
And the spring time days are here.
But to thee the tender cloud
Can never more be dear,
I rare skull so white and cold,
Laid found dead;
The mould of earth that gave thee birth
Again shall claim this head.

The voice of the teamster is loud,
And the snap of his whip is clear,
But to thee his voice is dumb
And his whip can bring no fear.

Gran skull so white & cold
Laid former dead;
No thoughts again of pleasure or pain
Can toss this resting head

There was not much for thee

In this world that thou should mourn,
There is not much for thee,

Now that thou art gone.

Gran skull so white and cold
Laid former dead,

Who can say of the destined way,
When the spirit's light has fled?


Sunday, April 22. Indian implements in
the fields about the Billepp house. Found
a large & clumsy axe & the handle of a pestle.
Trailing arbutus is blooming. It rained
all day so I was wet to the skin.
One of the large cedars near the Billepp
house measures 5 ft - 4 1/2 in. in circumference.

May 6. Maloe angustifolia flowers.

Tuesday May 8. On Sunday I went to Blenheim
Chelsea &c. The so-called cow-wasp is now
in flower. P. rapae & the little blue butterfly
are out in numbers.

A Mr Merrill, who lives at Malchoque, has
many Indian implements collected on his
farm by the Kilt. I saw them Sunday. He
has a particularly large axe & also a

1883

number of bead like objects.  They are in shape like the figure.

Notes. Noted 2 then 3 nests, each with three eggs. Humming birds visiting the blossoms of a cherry tree.

The left side of my head was swollen on Sunday & I did not feel at all well. I suspected I might have the mumps & today I can say I have them without any doubt.

Humming May 11. The pear trees in the garden look pretty, now, they are out in bloom.

The mumps still keeps me hoarse

May 20, (Sunday). Indian implements at

Indian m'ns. Totten like, at the Billopp house. Net mitters, arrow heads &c

Billopp road Along the high bluff near the Billopp house I observed last year, or the year before, several

fish holes, which I then thought might be made by sand swallows. I remembered the

fact today & went looking for them, and was rewarded by finding one into which I

stuck my stick when out came a King fisher. I accordingly took careful bearings

& dug down on the nest which I had located quite correctly. It contained some

lines of fish & some fresh eggs.

Big holders have laid their eggs

55
Duck &
boy
Friday, May 15. A boy on the Battery at
N.Y. with a tame duck & a bundle. The
duck became troublesome in its struggles to
regain its liberty so the boy laid bundle
& duck on the wall & commenced to
tie the latter legs together. The bird
finally, gave up in despair & lay perfectly
quiet letting itself be tied without a
sign of a struggle. It is only those who
persistently fight for their rights that
are finally victorious.

Bristerium
Sunday, May 16. Found the little Cirsotomum
pennsylvanicum at Bloomfield near the
salt meadows. Then on some fine woods
& swamps near Watchogue (Bloomfield)
they are such a tangle that they hardly
seem to belong to N. J. I waded in
water sometimes a foot & a half deep, then to
a thicket caused by some large tree growing
up in the water, where I could get a better
view through the trees.

Butterflies
June 10. Parnassius, troilus, astynius & philenor
butterflies abroad. Caterpillars of Vanessa
Antiope on willow now

Great crested
fly, caught
M. Phadon
Argynnis cybele
June 17 (Sunday) Great crested fly catchers
nest - in Clove valley. Also Phadon butterfly
plentiful in Clove valley. Argynnis cybele
abroad.

Toads
June 20. Toads singing this P. M. Captured
several males near a small pond at the
head of Bard An. Quite black on the

throat at this season.

About half past ten I started ^{for} home along
Castleton Ave. thinking of the insects I had
seen that I had seen, when suddenly, a
gruff voice demanded where I was going,
& for me to "hold up". I stopped to look
at my accoster; it was all done quickly &
I felt myself growing cold. Up on top of
the wall lay a man resting his head on
one arm, his legs, showing plainly, against
the sky. He got off of the wall & was
coming toward me when he caught his
foot in something (for the ground is covered
here with small trees, black berry bushes &c.)
& fell. This was my chance so I
ran away as fast as I could, but he
did not follow me.

June 24. Lately I have been looking toward
evening in the trunks of trees in the woods
for insects. I have had very good success.
C. rufipennis I found. Besides many small moths
three specimens of *C. rufipennis*. 1 ♂ & 2 ♀
June 30 *Copris Carolina* lived about
fifteen minutes in the cyanide bottle.
Eudamurus used today. I captured a new butterfly
Lyceus. for the Island, *Eudamurus Lyceus*. Caught
Agynis Idalia it in Clover Valley. *Agynis Idalia* & A.
Cybele *Cybele atrata*, also *A. Myrina* & A. *Heina*.

1892

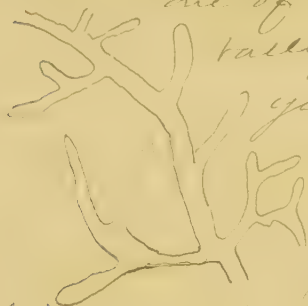
Cicindela dorsalis
Uthysa

July 4 To South Beach today. *Cicindela dorsalis* common. *Uthysa bella* common at Fort Wadsworth.

Vanessa antiopea

July 5 Between 50 & 600 specimens of *Vanessa antiopea* hatched yesterday. They went into the chrysalis state within a few hours of each other & they observed the same method in hatching.

July 17. I found near the edge of one of the ponds in Clove Valley the root of the yellow lily that some one had dug ashore. It was fifteen or twenty feet long in places 5 to 6 inches in diameter. It looked something like the figure I have made.



Butter ball
bushes
butterflies

July 21. I find (as I have before noted) that the "butter ball bush" is the place to catch butterflies. Without any exaggeration I saw over one hundred of the butterflies to be found at this season flying about a small clump of these bushes. *Punus*, *Cybele*, *Glaucus*, *Archippus*, *Huntera*, *Laricia* & *Vilgus* were among the larger ones, while "skippers" abounded.

1883

In the Clove valley I captured Chauliodes
bectinicornis in a spiders web, or rather
the spider captured it & I found it there.

Of late I have had great success against
Erebos odora for moths having captured Erebos odora
in this way. The odd, Neotropical insect,
Ascalaphus Ascalaphus trimaculatus flew to my
lamp one evening.

Sunday Aug 5-83. Found a land turtle's shell
Land turtle near Knoxville, with a hole in the
side & all the bones & flesh cleaned out.
It had evidently met with a violent death
at the claws of some animal or perhaps
the fall of a crow. It was about a third
grown. Picris protolice & Limnitis
ursula out.

Aug 11. (Fourth vacation day) Hemaris thysbe
thysbe plentiful about thistle tops. Argynnis
Idalia & cybele still to be seen, but
butterflies colors rapidly fading. Danaus archippus
in all its stages now.

Aug 12. The hazel nuts are well on now.
Hazel nuts & look as if they would be ripe in three
weeks. They are indeed beautiful things
Song sparrows at this season.

Sparrow (song) sitting on rotten eggs.

August 16. This has been an exceptional Summer so far, as it is the remnant of the season all that they do not remember as more pleasant one. There has been plenty of rain, most of the days have been cool & the mosquitoes have not been as plentiful as usual. Nearly every day for the past month I have observed men on the boat with their spring overcoats either on their arms or backs.

Orthoptera

Orthocentrus, *Katydid*, *Oecanthus* & *Amnophthalmus* *insignis* *stridulatus*.

Bumble

Aug 25. I tried to follow bumble bees to their nests today by tying string to their legs & then running after them, but as the experiments were made in the garden the bees quickly got over the neighboring. I gave them sugar before tying on the string.

Aug 26. On Ocean Terrace Road Sawyer

Catantopidae

I found many caterpillars; one *Lema*, two *Diadriornis*, five *Polyphemus*, three *Impatiens* & two *Regalis*.

Poll

Sept 4. It was so cold this morning that I could see no trace.

Framea

Sept 4. *Framea carolina* flying Sunday Sept 23rd. I went to Richmond Valley today to see Mr Page who

has recently returned from the West. We
walked along the shore & on the bluff
afternoon by the Light House as we usually do.
We found some fossils & he had captured
for me a walking stick insect. He had
it alive under a fly trap. It was
a male. This is but the third one
that I have seen from the Island,
for they do not seem to enjoy
the vicinity of the salt water.

Sept 29. (Saturday) With mother, sister
& aunt to Pottsville. The usual number
of Indian implements in field near
Billopps house & a new Hesperian
for the Island in the cave.

Pyrgus
lescellata *C. Regalis* Sunday Sept 30. *C. Regalis* caterpillars on sweet
shad frogs. Shad frogs in vicinity of Watchogue.

Oct 28. 1883. Trees of the river
Betula nigra larva (*B. nigra*) at Bull's head, near the pond
Oct 30. I have been working every night for the
past fifteen or twenty days at the insects which
I captured last summer & have got them
with the exception of the beetles in very
good order. I have a row of *Catocala*
argyrea (*C. neogama*) that shed great variety
if they all belong to the same species.
Nov. 2nd I registered today, my first
expenses; intend voting the Republican ticket.

It is only, I think by collecting ^{natural} objects
& observing nature very sharply ^{for some times} that we
can form the true notion of how
things vary, not only species, but seasons
and times.

Sunday, Nov 4. Many butterflies, dragon
flies & beetles abroad. It was a perfect
day, warm & pleasant, & I do not
wonder that the insects were tempted
out of their hiding places under the
leaves & stones. In one place near
a stone & about three inches under ground
I found a toad, that had evidently laid
himself up for the winter.

Sunday, Nov 11. Littosphæa Bostreni in blood
root ball. ♂ & ♀.

Nov 15 The moon was surrounded by a
rain bow tonight, sometimes there being
~~also~~ an outer one as well. The moon was
at its full.

Sunday, Nov 18. To Tottenham, Indian implements
in the fields by the Bilbop house; they
always supply the demand.

Nov 25. Grass hoppers are still to be seen, show-
ing themselves on the bottom boards of the
fences & other insects are also abroad. A
day or so ago it was so warm that we had
no fire in the house, except in the kitchen,
for 48 hours, though previous to that it had
been quite cold and a little snow had
fallen but melted as soon as it reached the

road

1883

ground.

Thanks giving day, Nov 29. The skulls of the rays that I found on Smith beach today seem quite small when compared to the dimensions of the fish.

Tuesday, Dec 26. The snow lies this morning over 20 in. deep. There was a light-fall last night of very wet snow, & this morning the trees are beautiful.

1884

- 1884 -

Sunday, Dec 9th 83, was such a pleasant day that I wrote the following to the sun-shine & the memory that it leaves.

At Sun Set. (a day afeld on S. I.)

The glorious sun is setting
In the far and distant west,
And the clouds all golden laden
Seem sinking down to rest,

The night is stealing onward,
The day is doomed to die -
Sadly moans the pine tree
And darkly the shadows lie.

The day was one of glory, and
~~At~~ the sun did brightly shine, ~~and~~
No heart in all the wide-wood
Has been so glad as mine.

62
I went when fancy led me,
For fancy is broad & wild;
I played when beauty kept me,
For beauty is soft & mild.

But the glorious sun is setting
And the day is no longer mine;
Could I but turn the hour-glass
And hold the sands of time.

Sunday, Jan 13, A. C. Wray & I went to South
Beach looking, going as far as the three
elms near the new Dr. ^{Wray's} horse.
Surviving elms of the "Elm Tree light".
Though a very nice day it was cold &
the snow & my old gloves having got wet
the last time I was on the beach, I was
unable to get them on. I found quite a
number of very good specimens, a
Helix probably from England, brought in
in a barrel (not *H. aspersa*). *Mastra solidissima*
quite curiously deformed the shell being
bent much out of shape & the transverse
diameters of the valves quite unequal.
When we got to the cedar trees we
made a fire in a convenient hole &
became quite warm. W. lent me
his mittens & I never experienced any

Helix

Mastra

thing so pleasant in the way of warming
up my hands, for I had no more than
put them on than my fingers became
quite numb & I could pick up chips
without gloves for our fire with great ease.
I afterward got my gloves warm so that
I could get them on.

Tellina

Coming home, I found a little lobster,
some specimens of Tellina fusca, one
of a beautiful pink color, besides a
few small pieces of shells, pieces
of coral &c.

We noticed one of those beautiful red
sun-sets which are the reward of every one
winter-days.

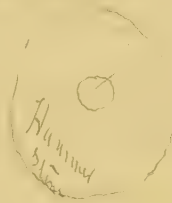
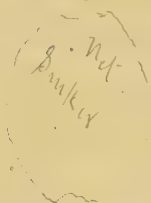
Ice in
the bay.

Jan 17 '84. Much ice in the bay now. It is
interesting to see what forms it will take
generated of course by the tide. Today
there was a ribbon like band, that
appeared to be about 100 ft wide that
extended as far as I could see down
the bay. It was probably 8 or 10 miles
long & was crossed & recrossed by
smaller bands.

Jan 23 On Sunday a light dry snow
fell & I took one quart - which I melted
for the purpose of seeing how much
water it contained. I got 2 liquid
ounces.

February 12 (Sunday) It was very pleasant
 & warm & an overcast was almost useless
 today. Some interesting concretions on
 the shore near Pottsville. I found
 one covered over, as is usual with them.
 in this locality, with a layer of iron permeated
^{in this case} rock, partly broken off. Upon cracking the
 specimen I found the interior to be gray
 & large cracks running in various directions,
 the sides of which were rough as if covered
 with black sand paper. Some of these
 concretions show, when broken, putty dark
 & light colored rings about a central core.

Concretions.



As usual, Indian
 implements in
 fields near Billogg
 House.

Song sparrows, Feb 20. For the past several days I have
 also heard the song sparrow & yellow bird.
 Just hatched. Washington's Birth day, Feb 22. White bellied nest
 hatch & yellow rumped warblers.
 water beetles under the ice,

yellow rumped
 warblers.

When people call fowls or other animals
 I do not think they really know how
 often they try to imitate some particular
 note or call of the species attracting their
 attention. Listening to a man today
 calling his chickens I was reminded of
 a hen cackling.

Seal
Northern diver. Today I saw a Great Northern diver in the bay.

Low tide. On February the 29 the tide was so low, that the Brooklyn boats & those running to Staten Island were unable to get all the way in their slips and were obliged to land their passengers at the end of the piers. This is the lowest tide I have seen. The teams were carried up & down the bay because they could not get off of the boats.

Seal
Tuesday Mch 4. 84. I saw a seal sitting on a cake of ice in the Bay this morning, basking in the sun. It was said that there was a second one, which I did not see. About Immer's Pt. there is a great deal of ice at certain tides, which makes the morning look quite Arctic & pretty. In some places the ice is piled cake upon cake so that it is quite high out of the water.

Lightning & thunder. Tuesday, Mch 11. On Sunday there was considerable lightning & thunder.

Seal. Sunday, Mch 16. Some gulls from the white oak & the first butterfly of the season. Imphi proque

67
I do not see any flies about the
Hyla. Junco villosus today.

Red-winged
blackbird & Red-winged black-bird.

Sunday, March 23. At Holokou N. J. on the
borders of the low marshy flats there are
a great many beetles to be found at this
time of the year. The ground is covered
with stones from the steep adjoining hill
& snakes abound, several of which I saw.

Snakes.

One little brown snake I had in my pocket
for a long time. The squatters build
houses in these swamps & get to them
by means of a bridge or elevated walk
on piles. They may be called Holokou
lake dwellers.

On Saturday I saw several geometrid with
Hemiptera. about the lamp post in the street, one of which
I caught.

March 30 (Sunday) To South Beach. It was
so windy that the sand was lifted off of
the beach & came flying against the face
so that it did not do to turn your
eyes in the direction from whence it came.

Salamanders.
Ambystoma
Oreomyza
epunctata

Then through the wet meadows to the
uplands. Ambystoma punctatum & D.
miniatus under stones near Reed's mill.
The stump cabbage is up.

1884

Crow

Tuesday, April 1st. As the ferry boat left Whitehall St. today at 5 P M. I noticed a crow flying over Governor's Is. The bird had evidently come from up the East River. It followed along in about the same course as the boat & at about the same speed, keeping high up in the air. Finally when it got several miles down the bay it flew over the boat to N. J. or the western shore of . . .

Am. L.

Friday, May 16, 1884. It is a long time since I have written any thing in this journal and it is a long time since I have gone over my sacred spots in fields and woods. On Saturday, April 5th I came home, after I had finished my work, not feeling well. As I grew worse I finally went to bed, and it has only been for the last 3 or 4 days that I have been able to leave it. Today I went down stairs for the first time and got this journal. I should have stated above that my ailment was remittent fever. I did not suffer much, but I grew very thin and lost all my strength and am still very miserable. When I went to bed a snow squall might have been looked for any day, and when I got out the leaves were on the trees. The blue butterfly.

are gone.

Saturday, May 17 Sawyer met a rooster in the road near Malchoque & spotting Sawyer & the bird with a stick, so enraged it the rooster that the cock spurred him in the foot through shoe & all. This little bit of hurt caused Louis' foot to swell so that he was unable to walk for several days.

Sunday, May 18th. This day was so warm that I went out of doors for the first time since my illness. It is indeed a pleasant thing to sit in the sun shine & especially when one has been in the house for so long a time.

Tuesday, May 21. I went down the village today for the first time & find I can walk now, well.

Robin
cat bird

There seem to be a goodly number of birds in the garden this year, & a pair of robins & cat birds have taken up their quarters & built nests. The chipping sparrow is here in force as usual.

Sunday, May 25. Owing to the circulation not being perfectly established in the capillaries, the backs of my hands have hurt me much, smarting sharply. This very often follows a fever, I am told.

Cithæronia

Empretia stimulosa & Cithæronia regalis came from their chrysalids a few days back.

Tuesday, May 27 I do not improve in health as fast as I had hoped - not as fast, I think, as when I was ill, before. But I am getting on & hope to go to N. Y. city on the 2nd of June (Monday)

June bug
& ant.

I saw a "June bug" (or maybe we might call it a May beetle at the present time) with an ant fast of one of its hind legs. It was evidently doomed to die by that ant and its companions.

In 1882 I brought home from Pottsville some moss, which I found growing in a brook. Grand mother planted it near the stone wall on the north side of the house, some six inches from the stones. I now notice that the plants love for moisture has taken it close to the wall, so that the stalks come up, in most cases, as near the wall as they possibly can.

Saturday, May 31-1884 I am getting on now pretty well towards recovery, but there is a pain in my back just about where my left kidney is. I do not know whether it is a sprain or whether the kidney is affected. It is getting better, however, so I am in hope it will entirely go away.

It has been very cold lately.

200

up the Hudson many plants having
suffered from the frost. In northern
New Jersey, ice formed an inch thick.

Sunday, June 1st So cold that we have
our furnace fire going.

201

Saw many of the ear wigs that occur under
stones &c. in our shore this afternoon.
I observed one running up the beach from
the rising tide. As a rule they do
not show themselves.

P. Latulani

Development
of Luna
moth.

Sunday, June 15 Pimpla Latulani out-
ed. Luna moth which hatched from the
chrysalis today developed its wings in
an interesting manner. The left pair
were only about $\frac{1}{2}$ the size ^{of} those ^{on the} right
side, when the latter had apparently
attained their full dimensions.

This is the reason to gather the large
galls, such as C. spongifica &c.

Rhemaptera

Sunday, June 21st On Friday I caught a
male specimen of Rhemaptera
hastata in the office & when I got
home I found they had taken a female
specimen. This insect, according to
the synopsis of the family is more
common northward. I have never seen
a living specimen before this year.

1884
Sunday, June 29. On a tree near Logan's
spring there were six oaks, the mother
of them.

I met a German entomologist, who
could not speak any English, so we
talked German & got on after a fashion
except when I broke down.

Imperialis
moth. I found an Imperialis crawling up a
tree, it having just emerged from the
chrysalis.

Chipmunk
& moth. It is unquestionable that meat of
some kind is necessary to squirrels.
Today I saw a chipmunk catch a
moth, pull off its wings & eat it.

Friday, July 4-1884, To Prince's Bay. It rained
much of the time. On a piece of drift-wood
a Tongicorn & under a dog-fish some others.
Indian
implements I found in a field near the Kellogg
house about fifteen Indian implements,
mostly net-sinks.

Rabbit's foot
claw. The rabbit's foot claw is in bloom.

Sunday, July 6. W. Page, his brother Henry
& I took an oyster boat & rowed over
to the Army ship - to Cheesapeake Creek.
At the mouth stands the Applegate house.
It was rather hard work getting over as the
tide & quite a strong wind were against
us. The country is quite wild all

Cheesapeake Creek
New Jersey

Diplax
bennece

about as far as I could see which
was a good distance. Bluffs face
the creek on both sides & only at
certain points, chiefly near the
bay can a house be seen. Weasels
were abundant as do. Diplax bennece
& swallows perching on the poles at
a decayed landing place. I found
a dead fish on the shore near the
mouth of the creek & under it were
many hundred beetles, chiefly Hister.

Wood ticks

Sunday, July 13. Many hundred ticks
in the cedars at New Drops by the
beach. On a tree were a number of
large hemiptera (I am Scutellidae) running
up & down on the bark which they greatly
resembled.

Hadena
lignicolor
Cicada
Conocephalus
cubiger.

July 20. Hadena lignicolor. Harvest-flies
& Conocephalus cubiger than appeared.

Sunday, Aug 3rd 1884. I went to the pits
on the Serpentine road to see if I
could not find some mammals in
them. These holes were dug while prospecting
for iron. I got down in most every one.

Amblystoma I found several beetles & three specimens
of Amblystoma punctata, two large ones,
& a little fellow almost all black. I
noticed that the younger they are

1884

the faint yellow spots they seem to have.

I have only seen two *Pieris* butterflies this summer & a very few other species in fact for every butterfly I have seen this year. I think I saw 15 or 20 last. Blue heron. And blue heron by the pond in the Clove Valley where the iron breaking machine is.

A beautiful blue black *Aegeria* with orange band on abdomen (*Aegeria*?) on pine. It resembles the fly *Ptilodas*.

Aug 7th. It is not often that the grass remains as green in August as it has this year. More every day for a long time past. Green fields then have been brown & very often cold winds. As a consequence valley & hill side near the aspect of early June. Aug 9. A few days back Page gave me the caterpillars of *Cithonia regalis* which had been found on Sumach, (*R. copallina*).

Sunday, Aug 10-1884. At about 11 minutes past 2 P.M. there was an earthquake of considerable power. I was sitting near me of my insect-cases which swung backward & forward causing the boxes to rattle. It lasted about $\frac{1}{2}$ minute.

I did not go on a walk.

because. I did not feel very well last night & I am so fearful of being ill again that I take every precaution. The weather was also cloudy, though it has not rained up to this time, so I think to go out & see earth quake frightened people.

Late hatching Aug 12 Though most of the *Cecropia* & *Cecropia* moths hatch in June, yet today a ♀ emerged

Indians Aug 14. I go to the woods often after coming from N.Y. to get food plants for my numerous family of caterpillars. Today I met an Indian, an old sailor. He had a great bundle of catnip, which he said he was going to take to a family of his acquaintance in the city, who had a cat. He talked in short sentences. Among Indians - you know - no education - father took child to another tribe - he learn to speak their language. Go by horse - across great prairie - only see grass & little bushes - great blue sky - nice. He had very broad shoulders & was a nice good natured man.

Agouti
2 other
dogs.

On the way I met a dog, with his
master who was driving two cows.
The dog when near house found a
bone but-as he had a muzzle on it was
~~was~~ hard work for him to carry it. However
he got on with it pretty well until he
met two other dogs when he retreated
in a gate-way and waited until the
man came up. His hair stood in
a ridge on his back & he was evidently
afraid of losing the bone which he
was unable to defend. He very soon
reached his master's gate & I saw
him return joyfully with the prize.

Both mice
mole.

It seems to me that the moles
go away for a space after breeding at
least I do not see anything of them
during July, yet in Aug (about the
18th) they may be heard again in
the morning & evening calling their
well known note. Perhaps they are silent in the

Citharus
regalis
Citharus
a fungus.

Aug 17 Caterpillar of C. regalis on
sumach. In a fungus (eating it)
quite a large wolly caterpillar of a
Molybd. Stizus about to bury
a ♀ house fly, in its burrow in
the hill side, back of the house.
Some sparrows about the house.

to
In

A negro searching for a moccasin or
see on a trail, at a place where
horse he was harnessing.

Aug 19. Last night & the night before
a bat flew around the bed rooms. I
might have captured him but I did
not care to rouse the entire house
as I might have done had I made
the attempt. When looked for in the
mornings he could ^{not} be found. I do
not know whether he comes in every
night or whether he has not been out.

A Bat.

Pyramia

Aug 30. P. carolin is here in great
numbers this year & the. usually common
P. hunteri is rare.

Milk snakes
eggs.

Aug 22 Eggs of Ophibolus dolatus (milk
snake) at Kreisheimiller. About 13 eggs (some
broken) & young hatched from a few. The
largest snake taken from an egg was 1 ft.
& 1/10 in, the others about 1 ft.

Hamst fly
in spiders
web.

Aug 23 (Sunday) In a spiders web I
found a female hamst fly. The
web was made by the large yellow &
black spider, Argiope?

Cecropia
Larva

Aug 31 A few days back a Cecropia moth emerged
& Mr Hamath gave me a Luna that had recently
been brought to his store.

Sunday, Sept 7 Treas & I went to Aug
Island in quest of insects. The west end

Coney Island

of the Island is covered with vegetation, with wild cherry, red maple & cedar trees in considerable numbers. There is an abundance of Virginia creeper & poison ivy, the former is turning a deep red at this season, while the latter is a beautiful green. In all I think I saw one hundred different plants & probably a considerable collection could be made there. We caught a great number of insects. A large species of Conocephalus, a sand colored Agrotis the usual species of sandy ground grasshoppers & a goodly number of beetles. I should also add a Melomela taken in considerable numbers on the edge of the salt meadow. On this same meadow the east sides of the fiddler crab were between many of the grass stems where their former owners had scraped them off.

Sept 10. At Page I noticed a turtle in the bay, the first one I have ever seen there.

The boat ran over it & the barrel hoops which it had hold of with one of its hind legs.

Sept 12. Last night I caught several species of Conocephalus & Agrotis.

179
Among the number. The best thing that-
Conocephalus I found was a *Conocephalus* (sp?)
without a head, but stridulating as
well as its more fortunate companions.
When I approached the insect & touched
it with my finger, it did not close
its wings as is generally the case.
I brought him in the house in hopes
that he would stridulate again, but
he hasn't as yet.

He
came
Sunday Sept 14 To Cowles Point.
White bellied swallows flying about in thousands.
A hawk flying up & down the point perched
on the bushes, perhaps looking for mice.
I saw a mouse but was unable to catch
him. Last Sunday I saw a similar hawk.

Pyramenis
cardui
Pyramenis
cardui
That my best capture remains to be told.
In a damp field, where there were
many cat-tail rushes, I heard a
number of insects stridulating & so
went to investigate. I could not
make out the insect for a long time,
whenever I came near it would
stop singing & as it remained close
to the ground in the high salt grass
it was difficult to find. At last

1887

Cerocephalus I made out a large insect which proved to be a *Cerocephalus*, a species with a very long horn. After an hours work I caught four.

Rail

Sunday, Sept. 21. To Richmond Valley. A rail hid by the road side. Saw it about through the bushes. It hid away & I could not find it, but at last it fled from a clump of briars only a foot away from where I was standing.

Indian

implements

Indian implements. I found 1 hatchet 2 mortar like stones (quite large), portion of an arrow head, a small round stone "with a perfect groove around it" & many very good net sinkers

P. promethes

A *Promethes* moth hatched from the cocoon yesterday.

On Sunday the 28th, I went to the Harbor wood & spent a portion of the day in reading Mrs Shelley's *Frankenstein* and watching the birds, particularly the blue jays. I also caught a few grasshoppers & from the material so collected here.

Melanophus

made out the differences between *Melanophus rubrum* & *M. atlantis*.

Oct. 5th, 1887. Along the Harbor,

Wm. H. Henshaw

Rhus
copallina

Herzville N., Near Annadale Station
Rhus copallina bushes or trees about
10 ft high. Went out on a point,
which was almost surrounded by the
hills & salt meadows, when there was
an old stone house with many trees

After
I found

about it. Poked the pig, rubbed down
the cat & got a drink of milk colored
water out of the well. The place was
charmingly situated, the sand dunes
& old fields surrounded by cedars
to break the wind's force in winter.

Sunday Oct 12. Today I am 22 years
old & it may be worth while to state
that I have saved a little over \$1,300.
to aid my desired occupation as a future
tramp.

Cicindela
modesta

Cicindela modesta captured at
Richmond Valley.

Sunday, Oct 19. To Natchogue region.

Emm.
Tula

In the trap quarry is a little pond
containing many water beetles & beetles.
A little boy showed me a "painted
turtle" which he called a "King turtle".

Sunday, Oct 26. Near Annadale I
found two robins that had been
shot & in consequence disabled, though

1888
Holms

not so much so but what - They could
run very well. The stiff hairs along the
sides of holms mouths probably serve to
guide the worm in the proper
channel.

The view

The hills are so beautiful that I
could not help stopping now & then to
admire the scene. The red border of wood
on the Jersey shore, the blue water
between and the distance in a
mysterious haze.

view

Nov 9. To Totterville. The weather
was exceedingly fine and when we
sat down on the sunny side of a
bath house to eat our lunch and
looked out over the placid water to
New Jersey, things seemed to have
their fullest promise made of summer.
I found some interesting concretions &
grodes, evidently of recent origin. One
grode was attached to a stone and
cracked a small portion off, not, however,
so much but what it can be replaced
- that is fitted together again. In
another I punched a small hole & let
out the white sand & a third I left
whole. This latter is a regular
Indian implement or ornament.

Grade

Noticed a butterfly flying over the field which I thought was E. claudia but it showed no inclination to stop & I watched it out of sight.

Colias

Nov 16 Colias philoctice flying & grasshoppers not uncommon. In a log, bored by termites I found many of the peculiar cysts shells which from their confined position have been forced to adapt themselves to the shape of their dwellings.

deformed.
Colonia
shells.

A hammer stone & a few flint chips in the way of Indian implements. The day was so warm & pleasant that we could not help thinking about it, in rambling on.

Sunday, Dec 30. The cranberries still good to eat in the swamp near Richmond.

Cranberries

Sunday, Dec 7 - Though it rained and blew very hard last night, yet when morning dawned the sky was blue & the air warm. I opened the window and looked out on the calm bay and it was so pleasant that I left it open, not in the least feeling the difference between an open window & a closed one, so summer like was

1884

the morning.

At Totterville the usual number of Indian implements were discovered - & I was fortunate enough to discover a fine fossil leaf. I waded out to a musk rat's nest & pulled it open to see its construction. About $1\frac{1}{2}$ to 2 ft from the top I came upon a lot of softer material than the general structure of the nest & up through the middle of the above came a passageway. The rat evidently comes in from below up into the soft material, into which it can burrow, finding a warm retreat a foot above water & protected from above by a great mass of grass & other plants which it has accumulated.

Sunday, Dec 21. The snow lies on the ground today. I employed my time in making a list of the moths of Staten I. as far as the *Geometridae* inclusive, and also of the *Orthoptera*. I intend making one of the *Chrysomelidae*.

I have lately completed a collection for Columbia College, embracing about 600 insects.

Musk rat's
nest

1884

Christmas Dec 25, I bought myself
a present today. It was a pair
of rubber boots when with to tramp
in the woods in the Winter time,
so that I may see where the
mice have been & look at the birds.
I wore them today & found the
trails of many an animal connecting
stump with stump or stone, or seemingly
endless chain of foot prints.

Now

I saw a wren as I walked across
the ice in Silver Lake. The little
bird kept close to the snow, in fact
sometimes burrowed into it close to
the roots of the button ball bushes,
in search of something to eat. It
was very quiet about its work, not
making any noise whatever.

Natural History Notes &c.

- 1885 -

Wm J. Davis
Tompkinsville
 Staten Island

January 1st 1885. The first time I wrote.

January 1888 is to commemorate a tramp,

I put on my rubber-boots, and went down the R.R. to New Dorp, and from there I walked to Crook's Point. It was well indeed that I had the boots, for in places I was obliged to wade in water nearly up to their tops, but it was a pleasure to look out over the dark fields, see the muskrat nests, and great dead trees with crows sitting on their weathered branches. No one can safely build a house ^{when about} ~~any~~ ^{among the fumes} these meadows, for a great tide may cover the entire land with salt water & in fact this time of the year they are mostly swampy.

Soft shell clams

I have been interested in the differences in the soft shell clams, from the various localities on the Island, and it was for this reason that I went to Crook's Point today. The peat is exposed for a great distance along the shore, showing where salt meadows have been in time gone by, and in these remains of former verdure, the soft-shell clams drill their little canons. There is a great difference, however, between the shells that grow here, and those to be found along

the sandy shore. The former are as distorted
& rounded, while those of the sandy
shore are frail & even in their development.

On my way home I met Sawyer,
who had promised to come with me
in the morning but had missed the boat.
The points along the beach were covered
with gulls & we were very much interested
with their proceedings. Louis discovered a
flock of birds of a different species, and
afterwards we waded out on a point to
within a very short distance of them.
He thought the bird was the Kittiwake
Gull Larus tridactylus, and from the
description in Wilson I am inclined to
agree with him. "Tomahawk-Gull".

Sunday Feby 8th 1885. Owing to much work
and the disagreeable Sundays we have had
for some time past I have not been on
many trips.

In a cedar tree, near Silver Lake, I
found a nest of the white-bellied mouse
and climbed up and opened it, but the
mouse was out. There was a flock of

birds of a brown color in an adjoining
line, but they would not permit me
to approach near enough to see them plainly.

Red-winged black-
bird
In a small pond near the Little
Colon road I counted 18 ~~birds~~ nests
of the red-winged blackbird, &
very few of them seemed to be over a
year old. In this same pond I observed
through a clear place in the ice, & near
the shore, a great number of tadpoles,
little ones & big ones, some lean & some
fat.

Cardinal bird
In the woods near by, I saw the first
cardinal bird of the season, & on the
way home a few robins.

I met Charles Long, who was hunting for
beetles. His dog frightened up a rabbit,
and while digging for some material to
sift for insects, we came upon a
land-turtle, about 6 in under the
surface in the natural depression where
it had taken up its winter home.

Song sparrow ✓
Feb'y 19 Though the snow is still on
the ground and the days are cold, yet
this morning I heard a song sparrow, the
first one of the season.

1885

Feb 23rd

Bald eagle

Arca

With four companions, on a tramp along South beach. Near the fort we saw a bald eagle or white-headed eagle flying over. On the shore, which is covered with ice, I found a fine specimen of Arca transverse with the epidermis complete. Arca pexata is not uncommon in this condition but the other species is rare on our shores.

Rabbit tracks in the snow

See March 8

See March 10

In the cedars near the light-house we found a great number of rabbit tracks & droppings & the creatures themselves must be very numerous just here, though we saw none. When going slowly over the ground they make three tracks or marks in the snow, " " as in fig, but when leaping all four feet leave their marks.*

In an old apple tree, ~~was found~~ a screech owl with very red plumage, & in the hollow from which the owl was taken were a great number of pellets, all of which appeared much eaten.

March 1st A great number of birds are now abroad.

I saw

several tree sparrows & they seem to be very gaily decked at this season, the spot

Owl tree

on the top of their heads being bright & butty. I visited the owl tree spoken of on the 23rd of Feby, to see if the owl had returned, for it escaped from Miss Knight's house in New York, to whom it had been given.

It had not come back, however, & I am very sorry that the poor bird was taken away & its nocturnal perambulations disturbed. While walking through a thick little wood when the old swamp oaks hang their branches low to the ground, & the cat-brier makes secluded retreats for the "molly cotton tail",

Rabbit asleep

I came upon one of these creatures ~~in~~ fast asleep. I thought first that it must be dead, for I made a great number of noises both with mouth & feet without making it open its eyes. A dog even barked in the distance, but loud enough to awaken such a timorous creature as a rabbit, I had supposed. After looking at it for a long time, it started up in evident terror, & running across an open space put into a thicket. I measured the tracks from the middle of one to that of the other and found them to be about 9 ft., in most cases.

In distance a
Rabbit seen jump

I ended up with a tramp along the shore home & as it rained, I got wet.

6
A friend tells me that several weeks ago,
while skating, he saw a ^{shrew} mole run across
the ice & caught it after a little chase.

^{shrew}
Mole on ice


I know that ^{shrew} moles were abroad in winter
but did not think that they ever made
journeys in the day time on ice or on
land.

Sunday March 8th Thought it was a cold
day and the snow laid several inches thick
in some places, I went in search of some
of the well known hills. There

Robins

were a good number of robins in a cedar
woods & at this season their breasts are
very red. The first blue jay, that I have
heard this year, was near these robins &
sometimes he called very like one of the
birds & sometimes he gave his own note.

Blue jay

Last year we found a white bellied
mouse's nest & the little creature ran
away when we approached. I do not remember
that we displaced the nest in any way though
we stuck our fingers in it. Today I
found that the structure had been rebuilt
& very nicely at that, having a hole near
the top into which little  ^{shrew} ^{mouse} might
enter.

No mouse

I noticed today while crossing a small-pond on
the ice the tracks of a rabbit & instead of leaving
only three marks in the snow, as I stated on
Feb'y 23rd, I find that there are four, arranged
in the following order: . . . The rabbit had
evidently not been hurried & the tracks were
those of its calmer moments.

Sunday March 15 Though it rained
~~most of the time~~, Mr. Stevens and I went
tramping. With the aid of the rubber-boots
I found many interesting things for his
aquarium, particularly a very large caddis worm.

I had never seen this species before,
& am going to try to raise this particular fly.
While turning over stones in the bed of the
brook, I came upon a frog under one of
them, & Mr. Stevens says that on last
Sunday the fish in some of the deep
pools were abroad, though there were
none today. I also found a small, wing-
ed, neuropterous insect.

Sunday March 16. It is very cold now,
the ice in the bay being about 3 in. thick
& along the docks it freezes solid at
night. Today I saw a black-nosed
dace in the brook & also a frog.

3.1.1 eagle -

On one of the dead trees in the Harbor wood was a large bird; I think a bald eagle. Its wings were ^{stems of} truncated on the end in the same way ~~as~~ the eagle I saw on Feb. 23rd.

Ice

It is so cold that when our Logan's spring brook spreads out so that the water runs slowly it freezes. In places I could walk over this ice & looking down through it see the little creatures below.

Butterfly

Sunday March 29th 1885 The past several days have been ones of pleasant sunshine & warmth & Britton says that a butterfly or two was seen about his house.

Snow

Last night it snowed & this morning it lay several inches thick. However, Mr. Stevens and I went on a tramp to look in particular after some of the meadow mice. On Viburnum Hill we pulled many ^{old} birds' nests down & we found two mice at home, but they both escaped. Hesperomys leucopus. It was very pretty to see the little creatures jumping over the snow, & it was very easy for them to get away by burrowing into the leaves before we could get them the cat-briars after them.

Hesperomys

Their tracks in a cedar wood were very numerous & in some places they had jumped up & pulled

1885

off the seeds of golden rods, or what I take to be the dead stems of these plants.

Great white bird

High up in the blue sky, we saw a great white bird sailing about after the manner of a hawk. This was probably a gull flying over.

Black-bird

A great many birds are here now, having arrived during the last few days. In the swamp were several black-birds & many whose names I do not know were calling their notes. Britton says that he saw the first black-bird on the 16th of this month, as he was coming up New Dorp Lane.

warmer

"peepers"

Frogs

Birds

Good Friday April 3rd. This was indeed a good day for me. Outcrops were too warm, insects were numerous, "peepers" & other frogs calling their several notes, and a great throng of birds singing or fighting as the occasion of the moment dictated.

Spring has indeed tumbled right upon us this year, so suddenly has it come.

Wild geese

While Mr Stearns and I were looking for Indian implements in the fields about the Billock's house, a large flock of geese flew close over our heads, going up north along the coast. We could hear them squeak as they flew along & it was very pretty.

10
1885

to one who had never been so near them before. They flew in a line somewhat as represented above.

And Indian implements. I do not think I ever found any better ones.

A very good axe, some stones with grooves about them for ball sinkers, two pretty good arrow heads & a number of other polished stones of doubtful use, but not of origin. I also found a few more implements.

Arbutus.
Pussy willow

The arbutus is in bud, but the flowers are not yet open. Pussy willow do show their

Sunday April 5th.

Went to Hatchogue, New-Springville &c. On Hibiscus hill Mr. Stone nearly slipped on a woodcock, the first one I have seen this year. He also called on the mouse that we disturbed last Sunday, but it was not at home.

Woodcock

Amesbury

The Turnpike road was exceedingly muddy, as was most of the others, the walking being much better in the fields & woods. In a sunny place on the Turnpike, I saw the first Panther antelope of the season, though they have been abroad for some days.

On the long straight road that goes
from the Turning Star road

to Bloomfield, I observed
a most complete graft between two shoots
of large size, of the scarlet oak. The fig.
below gives somewhat the appearance of the hole
described. After leaving Hatcher's



(Bloomfield) we went towards Chelsea, &
on Union Ave. visited an old house

Old house
map: nest

in the front of which we collected many warblers
nests. One nest was new to me.
It consisted of five long rows of beautifully
ribbed mud cells each row containing about
six cells. It was built on a beam of
broken earth when I tried to remove it.

On Rockland Ave, just before reaching
the Corson place, there is an exceedingly
large elm as regards trunk, the biggest
one I know any thing of.

Just past Corson's, & probably the old
homestead, is ~~a deserted~~ a deserted house
with an interesting brick oven, old irons
for holding the pots & an old Franklin
stove, for burning wood. The well belonging
to this ancient mansion, will ^{long} live in my
memory for

Beautiful well have I beheld any thing so beautiful.
Tray down to the water, covering

1885

& reflected in the quiet pool below, was a most charming collection of moss & ferns. Not a stone was visible, so thick was this mass of green.

On this same road & a little further on we came to another deserted house filled in with brick set in mud. In this ancient abode I found a second nest of the ^{same} wasp, & I succeeded in removing enough of the plaster (which was put right on the bricks) to get the nest off whole. We found little balls of resin about as large as marbles which had evidently cooled out of the pine boards & fallen down between the bricks. Further on the same Ave & as we neared its junction with Rosewood road, we visited our fourth deserted house, out of which we got some more wasp's nests & looked at the interesting material left in the attic & rooms. From here we made straight for home, over the six or seven miles of country, for it commenced to rain.

Sunday April 12th I went alone down to Tottenville to look for Indian implements. The chief finds in this line were a skin scraper, a perforated

Indian in woods

stone of doubtful use, a large hammer
stone & few good fragments of arrow-
heads & one fine war arrow.

Stag horn sumach

Near the little point of land where I
had been looking for Indian implement
I came upon quite a large clump of
stag horn sumach, & I believe this to be
a new locality on the Island - for this
species. Last summer we discovered a
number of these plants near the highest point
& the only one known or before this time
was on Willert brook road. The heads
on the plants I discovered today are
very short.

Red cock & -

co.

'O' trilled, or fluted - a wood-cock,
& 'looked' carefully for a nest but
could find none. (Raymond)
He turned round
me a few days past which contained
several (4) large brown eggs. He also reports
king-fishers abroad.

King-fisher

Flying squirrel
& young.

April 13th 885 - I as Raymond tells me that
he found, today a flying-squirrel's nest in
a hollow tree in his garden. The nest contained
several little ones only a few days old.

April 16th I was on my first
afternoon tramp, going to the old
grounds in the Harbor woods. I visited a

smaller insects, other than the flies were seen.

Hydra bicolor

After waiting a while of time I finally captured a little fly. The sect. under his chin was exceedingly large and I suppose it hangs out at the same, and the fact was entirely new differing in this respect from those found in the fall. There was nothing great from which the Hydra bicolor, which saw in the water, & every time he saw a small insect caused little circles or waves to form about its head.

Hydra bicolor

One was fed out for to the field & it had extended to the roots. I put out as much O & S could but it has done much damage.

Thoughtless persons doing in this way more of the woods in a few years, than can be replaced by the growth of a summer.

Hydra bicolor

I went to the woods again this afternoon. The lilies, without out in some places so that the stamens show their bright yellow centers. The alders along the brook sides dust a golden shower when touched with the finger. Under some stone slabs I turned in, & found a few beetles & also the nests of a wasp, but there did not seem to be as many beetles as this time of the spring.

Hydra bicolor

Hydra bicolor

Beetles.

generally bring to view.

Sunday, April 19. I went to Rossville
starting from Annadale station.

Indian implements

In a field near the S.H.W. I found a
very good fragment of an Indian war arrow
& a little nearly mischievous & few more
implements.

Peter
Dr. L. A.

A number of insects were flying about today
& I captured a Peter. I also saw several
specimens of Dr. L. A.

Yucca

On a yucca tree I found one of the
fruit of the previous year that had become
completely hardened & wood like. ~~in structure~~

Marbled clay

One of the clay beds I dug out some
blocks & squared them with my knife,
the clay was beautifully mottled, or marbled
with red, this red color due to the iron con-
tained in it.

Food, beaks & piazza
posts.

An interesting fact which I have neglected to
notice in the records of my previous walks,
is the circumstance that all the piazza posts
(near the house)
in a decided dwelling near the Little Clove
road have been bored by woodpeckers,
probably the high-holder. This shows, I think,
considerable thought on the part of the birds,
in adapting these artificial structures to
their wants.

Earth worms

In the diggings for the Rapid Transit R.R.
I noticed what I take to be worn brachiopod
fossils going down to about 2 ft from
the surface. Today April 10 I noticed a
common earth worm coming out of the stone
wall in the garden and about 1 ft
from the top. The weather was
evidently warmer in the surface the day
before.

4p San Plodice broad

15 mm tube 2 1/2 simple be blowing about the
gardens.

Eggs of English Sparrows

Sunday April - 6. 90. English Sparrows
sent 4 eggs today. It contained 3, and
they were perfectly fresh. There is a great
variation shown among the eggs of this bird.
The first thing that attracted my notice was
the small twitter above my head when looking
out. I saw a small one - the first in the
year.

Swallow

Swallow
in the
house

Swallow

Chewink
Chat.

Willow

Under the bark of an old stump I
found what I take to be the egg case of
Chrysothrix it being longer & of lighter color than
the one found by Chrysothrix.

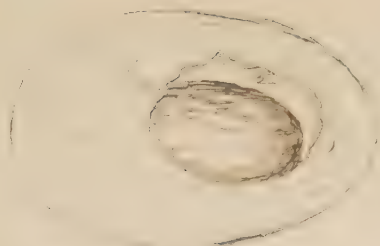
The Swallow have made their appearance
in the old house.

Near Rogers farm brook I heard a very
peculiar bird in the Chewink, and a yellow
breasted chat was singing on a high tree until
it was so dark that I could hardly see
him.

The introduced willow (Salix alba)

is now a
beautiful green, and most of the spring flowers
are in bloom.

At the last lecture given by the N.S.A.
a duck egg was brought for the lecture.



which
 is attached to the
 is a second egg
 below the egg
 shells at the
 attached.

Caddis flies

Thursday April 30th 1885. I went out to Logans
 spring brook in search of a few caddis
 fly larvae, which I found, & intend
 trying to rear. Many of them, of one
 species, had closed up the mouths of their
 tubes & I think have gone into the
 pupa state. One which I opened - was
 very languid, & I think had completed
 its growth. Most of the worms had crawled
 between the small stones at the bottom
 of the brook & so were quite protected
 Today as on the 27th there were many "day
 flies flying

Day flies

I saw a second swallow today
May 2nd I saw the first brown thrush
 today that I have observed this season.

Brown thrush

May 3rd (Sunday) went to Tottenham today with
 Dr & Arthur Hollick, Mr Stevens & his children.
 Many of the trees are out in leaf and
 blossom in this vicinity of Tottenham, among

collection, ^{which} ~~that~~ is a very interesting specimen.
Inside of the outer shell & at about 6 in. from
it on the upper side for it is attached to the
outer shell on one side is a second egg
of course. I think the egg
to be larger than the first shells at the
point where they are attached.

Thursday April 30th 1885 I went out to Logans
spring brook in search of a few Caddis
fly larvae which I found, & intend
trying to raise. Many of them, of one
species, had closed up the mouths of their
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very languid, & I think had completed
its growth. Most of the worms had crawled
between the small stones at the bottom
of the brook & so were quite protected.
Today as on the 27th there were many "day
flies" flying.

Day flies
swallow

Brown thrush

I saw a second swallow today.
May 2nd I saw the first brown thrush
today that I have observed this season.

May 3rd (Sunday) I went to Pottersville today with
Dr & Arthur Hollick, Mr Stevens & his children.
Many of the trees are out in leaf and
blossom in the vicinity of Pottersville, owing

to the warm influence of the sandy soil.
I measured a ~~bad~~ bush that has
grown to be a giant of its kind; it
was 3 ft - 3 in (about 2 ft from the ground,
in circumference).

Indian implements. I found a few Indian implements; ten
specimens in all.

Robin & blue birds are building and I
saw when a Kingfisher had started
to dig its hole in a bank; they are
not, however, very forward in the
matter this year.

Pine rapae. A few specimens of Pine rapae now
abroad, but as yet there are but a
small number of insects.

May 5 Cat birds are here and this
morning one was singing as I came by
a secluded spot on Fort Hill.

In Fresh pond (Silver Lake) I scooped
up a number of specimens of Cyclus,
more than I have seen at any
one time before.

Cold - It is so cold yet that our
over-coat is a convenient and
welcome garment, though a few
days past it was much warmer.

10821

Lycæna

Sunday, May 10 - 1885.

Blue butterflies. All day I stayed near the Ocean terrace road, about one of the Swamps.

Fish crow nest containing four eggs. Fish crow also nests of common crow.

Fish crow

Flying squirrel

Mouse

Ants

On one side of the swamp was a dead tree or "stub", there being no branches. After much work it was knocked over and a mouse ran out. A flying squirrel had fled from it when it was first hammered to see if anything was at home, and its abode was found near the mouse nest. In many places the tunnels of the black ants (who also occupied the tree) had penetrated the nests of these mammals, but the ants evidently did not disturb them. It is also interesting to observe the numbers of slugs of various kinds, and the sow bugs, which are to be found in these dead trees high up from the ground.

Slugs

Sow bugs

In another stub was a second flying squirrels nest. As fast as the squirrel was driven from its home it came back again if left undisturbed for a few moments. Finally the squirrel

sprang from a high pine to a distant tree
and so over the hill to the valley on the other
side and its last leap was a ground one
It leaped from a high tree, going down
the hill side & turned at right angles about
a clump of bushes, sailing in this direction
about five yards to the trunk of a tree.
The stub contained a nest and
four young.

Cicindela Cicindela purpurea abroad.

fulvipes I saw this morning in the garden,
Baltimore before starting out, the first Baltimore
ovule of the year.

Maryland Maryland yellow throat in numbers
yellow throat & Red start.

Red start.

1885

Saturday May 16th This is the first day
of my 12 days vacation, & I spent
it at Pottsville.

I heard the first Hyla versicolor of the
Spring, and Bufo ^{foetidus} ~~longirostris~~ also
sang several times in the distance. I found
one of these toads dead in a spring where
I think it must have fallen & not being
able to get out, for it was a barrel) died.

While I sat in a clump of bushes watching
how the birds acted about me, I was
attracted by the rustling of the leaves a
little way off which I suspected to be
caused by a snake.

Black snakes

I looked carefully
& observed two black snakes, one of which
almost immediately made off, going down
to the brook side, where the underbrush
was thicker.

I stood and watched the
remaining one for some time, waiting for
it to act, but it remained quiet, though
I was ~~very~~ close to it. I finally poked

Vibrating of the
tail

it with my stick, when
it vibrated its tail, causing a sound
among the dead leaves similar to that
which I believe the rattlesnake produces. I
made it repeat this several times, by stamping
my foot on the ground. Abbot writes
that Reithrodon platyrrhinus does this same

thing when disturbed. I followed this snake slowly about as it went from clump to clump in the bushes & in order to escape me it climbed upon the cat-briers & ~~very~~ quickly ~~wake~~ ^{off} going from bush to bush with great rapidity & in the same direction as the first snake did when I disturbed them. I watched it for a considerable time & at last observed it climbing a cat-brier which was lashed about a small - elm tree. It

to not to branch until it was about half up the little tree. It ^{to} stopped & I was surprised to see ^{another} snake ^{as it was} that had at first made ^{up} the top branch of this same elm. I was at a distance to observe what would happen to the ^{other} snake.

but they seemed much inclined to remain as they were. In the mean time a red start - lit on a tree near by this big tree and as I have seen this year.

The birds were very numerous here & pretty soon two very cat-birds came & lit on the next tree but they did not observe the snakes. They flew away after a while & many other birds came to the adjoining trees, but none seemed

Red start

to know that the snakes were about.
At last two more cat birds, or they may
have been the same two came to the tree
near by & in the middle of his song
the male bird stopped short & called
his cry of alarm. I was much
surprised to see the birds fly so close
to the snake lowest down in the tree,
many times not being a foot away.
Whether attracted by the cry of the cat
birds or not is more than I can say, but
shortly a brown thrush came to the
tree & with feathers ruffled showed he
was angry at these intruders. He
hopped about for a second or two &
then flew at the snake, as
striking him about
the middle of his body. This he
repeated twice more & then the snake
fell from the tree. He then flew
to the top of the tree & attacked
the other reptile, which let
go his hold after the first peck. The
cat birds all this time were looking on
& one of them made a good deal of
noise.

1. Cat male
& brown thrush

Afterward
I succeeded in making her vibrate his
or her tail after the manner I have descried.

Indian im-
plements-
thing fisher
& nest:

I next went to one of the Indian
implement fields when I picked up 8
pretty good- implements. I also found
that the thing fisher that builds here had
taken possession again this year & that the
boys had made a perfect path way up
the side of the bank to the mouth of the
tunnel. I thought I would open it &
see what kind of a nest she had made
this time not expecting to find any thing.

measured off my distance & dug down
on the north side laid in the side
of the shells deposited by the Indians,
so that I with difficulty dug through
them & I do not see how she did
at all. I was very sorry to find that
she had laid one egg for I had thought
the nest deserted. It was freshly laid.

Sparrow

When I was washing my Indian implements
by the brook side & in a swampy place
a sparrow flew up from a clump
of grass & upon looking I found its nest
with one newly laid egg. I also found

She will
2. american
Cetonia

a 'she will's' nest with one egg in it.

I saw the first Chrysophanus americanus that
I have observed this season. Cetonia indea

Synedra

abound. In the sandy places where grows
the Hudsonias I caught a number of Synedra

trapdoor - & under a dead Musk sat a great number of beetles.

Green heron The Green heron is laying now.

May 19th 1885. I notice that bumble bees

are not very careful when flying about - &

On the habits of Bombus that they often knock against the branches of trees. I saw one fly against

a black berry bush stem & almost fall to the ground in consequence. When going from

flower to flower collecting honey, they are not at all particular to visit those of the

same species, for I saw one first

go to a number of dandelions & then

off to several flowers of Uvularia.

May 21st. On turning over a stone

found a nest of our common Polistes of

twelve cells. This number only makes a very

small nest - or group of cells about $\frac{1}{4}$ in. in

On the habits of Polistes diameter. Yet about this small nest I found

two wasps, which I think must have built

it together, as it is too early for one to

be the parent of the other. The cells were

stored, each having its egg, and they must

be the first ones laid, as the weather

has been too cool for wasp life to

have made much advance. The fact



of two mother wasps building a nest together

is new to me. Especially as it

A chipmunk's nest containing three eggs
 & a robin's with two. The nest
 was in a hole in the ground. The
 eggs were fresh.

Some days ago I found a new place
flat land, which Arthur says is better
for grazing. It grows on the borders of
Lake Laker.

Sunday May 24th I went alone to Tottenville.
The sparrow nest that I discovered on
May 16th in a tussock of grass had been
overturned, probably by a cow, and its contents
destroyed. I found quite a small Cistudo
clausa, of a beautiful orange, much lighter
in color than the general run. They seem
to abound in a particular woods near
Tottenville, as I saw several others. I have
before noticed this particular liking
for certain localities.

Indian implements In one of the Indian implement fields
I found a number of sinker stones, an arrow
head and one implement that interests
me considerably.  On one end there
is a triangular (or rather two sides of a triangle) polished
surface, & on the sides, two others,
though not quite arranged as I have them
in the fig. I met with a boy who had
collected a number of implements, chiefly
arrow heads, and he sold me his stock
for 50¢. There was an ornament among them
that had a hole through one end, the other
extremity being broken off.  This hole had
been drilled from both sides.

After I had eaten my lunch & was digging
my finds in the implement line to the bank
to wash them, I almost slipped on

90 1898
a meadow lark and her eggs. This is the first one of their nests that I have come across. It contained four fresh eggs.

Black snakes were particularly numerous today. I found 3 pairs, besides two lone individuals. I succeeded in making some of them vibrate their tails in the dead-leaves as described on May 16th. With the lone individuals I had a little fight & succeeded in making one of them follow me for about 2 ft. They both bit savagely at my umbrella & one of them left a tooth sticking in its cover, for they would, or could not let go, when I lifted it up. One of these reptiles was of considerable size, probably 5 ft. long.

On the border of a marshy trench, I found a small specimen of Cinosternum pennsylvanicum.

I have several times found birds eggs lying about the fields singly, where they must have been dropped, and today I picked up what was most likely a Wood thrush's egg cast abroad in this way.

On a plant of dandelion I discovered fasciated growths. One consisted of two

Cinosternum

pennsylvanicum

Birds eggs lying
loose in the fields

Fasciated growth
of dandelion

stems & flowers, & the other of four. The stem, or combined stalks, of the larger one was over one half inch in breadth.

Nest of Field Sparrow
As I was tramping for the train across fields, I almost stepped on another bird's nest. This time it was the little field sparrow, with four eggs.

Helix
There are many more specimens of Helix at Pottersville & vicinity than can be discovered - on either, or particularly the eastern end - of the Island. I found a number of Helix alternata on a bank. They were all dead, & I think destroyed by the sea.

These birds in
fact
A friend says that on the 1st he found young blue birds full fledged.

May 26
Hippa
Heliophila
Several insects (moths) have come to my lamp of late. a fine bombus & Hippa cylindroides, with a phalaena or two. I suggested one night but only saw Heliophala unibrunnea.

May 27
A William goat
In a field back in the country there is a goat - a William goat - tied to a long rope, & when I go by this field I stop & see silly. He is very pleasant for a time but generally tries to buck me, as he did to day.

33 1885

At the end of his rope, in one direction, a *Tallian* goat he has worn the ground smooth by running back & forth over the space of two yards. The ground is quite level & I cannot understand why he does not go further, if this little run from side to side is for exercise. As he has a little bell about his neck he makes a *gong* on his way, and I today, with great amusement, watched him trot up & down for a long time. If the *to* stake is at c, rope d, my Billy walks along the curved line b & runs back to a, along the straight line.

There were two small calves in this field also, & one of them got my hand far down its throat in my efforts to see how its teeth were getting on.

I know of a number of oaks, that when the woods were cut down, several years ago, were left standing, their tops & main branches being lopped off. These trees have not shown any tendency to decay, as is generally the case when those around them have been cut down, & therefore it seems a good way to preserve

Remaining trees.

Sunday May 8. Yesterday (Decorative day)
it rained, as it did this morning, but
about 10 A.M. I started out, as it looked
promising.

At last a few insects fly along the
road sides & nature begins to wear
the appearance of summer, which has so
long been coming. I saw Phyciodes
Papilio asterias tharos, & Papilio asterias for the first time
this season. Plathemis trimaculata was
also abroad. Several days ago I saw
Chrysopa a Chrysopa, & today I caught one. Some
hammer headed of the hammer headed dragon flies
Dragon flies, are also to be taken.

I found a high holder's nest with
9 eggs in it. This I consider a good
number, the usual set being 6 or 7.
Two of these eggs were fresh, & the
others were in all stages of incubation.
The Maryland yellow-throats, I think
have not laid their eggs yet, for a
nest which I looked in contained none
though it evidently was just made.

I found a nest, which looked rather
poor in architecture, & on which sat
& brownish bird, but it flew off before,
& in such a way, that I got but an
imperfect view of it. It contained

egg about the size of an wood thrush's, but was flatter in its lateral diameter, and covered thickly with very dark spots. The ground color was pale.

June 4th I revisited the nest spoken of above, and found that the bird had laid another egg. I took the one away on Sunday, as I had never seen any thing like it before. It belongs to the Cardinal grosbeak, a bird not common on Staten Island.

My little Maryland yellow throat had laid two eggs, but I had a long search before I could discover the nest again.

June 6th. I revisited the cardinal bird's nest again today, but someone had taken the egg I left in it. The Maryland yellow throat however, had laid two more.

Pyraus citatus

For several days the Pyraus citatus butterfly has been flying about, & today I saw the first Cecropia that had been hatched out of doors.

Cynops seminator galls, are remarkably abundant on the white oaks in a little wood I know of. I do not remember ever seeing so many before.

Eurygaster
Eudamias
Pamphila
Danaus
Gonistictus
Libellula
Anax
Platania

Sunday, June 7th I went Richmondward.
Eurygaster was ~~not~~ taken, one specimen
Eudamias tityrus *Pamphila zabebar* &
Danaus archippus were seen flying
about & some of the *Hesperians* taken.
The chief kinds among the insects were
several fine *Gonistictus*.
Libellula semifasciata *Anax junius* &
Platanus to *Platanus*, we all stood
some *Platanus*.

Androsphinx
White-eyed vireo

A nest of *Androsphinx* eggs
of the spotted kind, that is having larger
blotches than they can really do,
in hollow apple tree I found a nest
of three short-stumpy eggs, belonging
to the great-crowned flycatcher. In a
bush about two ft. from the ground a
Vireo nest containing one egg which I
did not disturb.

Quail
Robin

As I approached the foot back of
Richmond, I flushed two quail from
a field among the high grass, & a little
later on a 3rd one but could
find no nest. The *Robin* also
inhabit the fields in this vicinity in
numbers, and it is a pleasure to
hear them singing as they fly after water.

after the water.

In a little house retired back in
a hollow mountain, it is a small
house, but it is a long way from
any other house or the public road.

Old lady in
a house in
the woods.

dwells an old lady with a most
gentle countenance. At
the time I called for a drink of water
she came out to the door
plain features of her face. That plain
or simple countenance in life could be
brought such a superior personage. In such
a place is more than I can guess but
I will never forget the surprise as
I turned the corner of her house & met
so unexpected a person.

Excess of the leaves of the black birch, I found
a very peculiar excrecence of a bright
red color but I do not know that
it was made by an insect, at least I
could not make it out so with the
magnifying glass. (Made by a species of mite)

This evening at 8.35 o'clock *Aeschna*
heros flew into the window, attracted
by the light in the kitchen. I have
never known before that dragon flies fly
so late at night.

I should have stated above that the warbler
birds were now has commenced to build & also a
few individuals have laid an egg or two.
I found one nest with two ^{eggs} in it; though
I examined many other nest ones which
contained nothing.

Neonympha erythra

(comes very much under
many species)

Wednesday June 10th. *Neonympha erythra* is
now abroad. I saw two individuals.

Summer yellow

birds' nest.

I found a very bulky nest of the Summer
yellow bird which I suspect is a two story
affair, the upper one being built over a
nest of the 1st year. However, later on I will
investigate. The nest contained four

Chimney's nest

eggs. I also found a Chimney's with two eggs.

The great occasion of this afternoon
was the getting a good look at a
weasel. P. I was walking through
some thick small growth, I heard a
slight noise & immediately observed

Weasel on

Chestnut tree

an animal a short distance up a
chestnut tree with a slightly leaning
trunk. I very soon made out that
the beast was a weasel, & taking
out my insect-net made ready to
attempt capture, the weasel all the
time going further up the tree. As
I was about to climb after it, the
creature missed its hold & fell out.

of the line str. 9 in the ... of
my net ... falling on the other
side ... to ... although
I ... the
life of ...
...
... for the absence of all
black ... the tip of its tail, is far as
I could ...
Thence ... to New ...
station ... after the ... nest I discovered
... though I made no mention
of it ... that later. It then contained
one egg ... today it had four. The
nest was about 2 ft from the ground &
was largely composed of a German news
paper, with some moss, & a few other
colored objects. It was almost completely
hidden in the cat briars though the nest
itself was on another plant. I think a robin
The little architect of this structure was
the white-eyed vireo.

Nest of white
eyed vireo

bumble bee in
mouse nest.

In a deserted nest belonging to one
of the mice, probably the white bellied
mouse, I found two bumble bees
& their comb. Somewhere in my notes,
long ago, I noted the fact of finding a
bumble bee in a mouse nest. I

Some that I do not know the name of this
Bambus, but such is the sad fact.

We better than I when I look in the
bushes & see the green eggs of the cat
bird of the mouse that will slightly
& I have this same nest in the winter.

Again when I disturb the mouse in
a single. I see it on a & it runs
off. I see it on a & it runs
that is to place its eggs in
this same str. chain, & I see the
eggs of it.

In the hollow limbs of the apple tree
where I got my three 'foal'-crossed fly catcher's
eggs Sunday, I found two more today
Sunday June 14. L. M. Sawyer & I
went afield.

Papilio troilus.

Ancylorhynchus.

Melitaea.

Geometrids.

Papilio troilus, *Ancylorhynchus*, *Melitaea* &
Melitaea phaeon were seen for the first time
this season. These geometrids can now be
taken.

The nest of the Chimney swallow with
two eggs & one of a Summer warbler
with four fresh ones, were found. A
cat-bird's nest full of ants was observed,
the bird having evidently been driven off.
Sawyer found a Summer warblers nest
in which the eggs had been set on some days.

Saturday June 20th 3rd vacation day. I went today with James Raymond, & we stayed for the most part in Clove valley.

In the butterfly line I saw Eudamias lycidas, the second example that I have met with, but I was unable to catch it. Also E. pylades Ancylorhynchos & Neonympha eurynia which was abroad in great numbers.

I captured a species of Verpa with ^{one of} the secondary wings gone (on the left side) yet the insect was flying about & seemed to get on pretty well.

Edipoda coral. Edipoda corallina, seen the first one of the season. Not plentiful this spring.

In a birch tree that was almost dead, I found a chrysalis of Prionoxystus Robiniae. This is the first one that I have ever found protruding from a hole in this species of tree.

In the bird line we found the nests of the following:- Green heron, with out eggs; Song sparrow, built on the ground & with four fresh eggs; Red eyed vireo, with two fresh eggs & a third one belonging to the cow bird - nest about 2 ft. from ground; Summer yellow bird, eggs set on for some time, so we only

Chat.

black & white

scattered when

present in

black & white

black & white

black & white

took me, Yellow breasted chat, with three eggs, incubation quite far advanced.

Last Sunday I saw the black & white ^{creeping} warbler in a small tree & this day I also observed one of the same ^{species} & perhaps the identical bird. ^{It was} near the same place. Does it breed here?

A pair of cat-birds made a great time as I approached a hedge row, & upon looking in I saw one of the funniest little birds that I have observed for a long while, it being so small and ^{flightless} that I could have easily taken it with my insect-net.

We found an open work box or cage, in which some one had imprisoned a brown thrasher & her young. The ♂ was flying about & hit Raymond in the head, as he approached the captive birds. It evidently was left to him to feed these poor prisoners. We let them all go.

Last evening I heard the first Geothlypis trichas nines? Perhaps it is an error.

Sunday June 21st I went for an all day ramble, ending at Richmond about 7 P.M.

Today, as yesterday, I saw Eudamurus lycidas but was unable to capture it. I also took a beautiful moth near a growth of ...

42
perhaps but I am not sure that it feeds
on that plant. It is a white & black color
like s-maculata but is not one of the typical

There is a great patch of poisonous grain
holcus growing about a mile from Richmond,
& on a new spruce, in a field, hundreds
of plants of the same kind.

Three small white patches were discovered
on the grassy field.

In a deserted house, I had built a
nest, & the eggs of the roller
of the

In an old house in Richmond

Chimney swallow

Phoebe bird

In a chimney swallow's nest with four
eggs fast, & another house a phoebe bird
with one egg this being the second brood
for the phoebe.

~~On the same day I found a large number of eggs~~
~~the same day I found a large number of eggs~~

Shore finch

In a clump of grass a shore finch's
nest was found with three fresh eggs, &
on the meadow the shell from which
a young mud-hen had emerged.

Mud-hen

On these same meadows I opened a
musk-rat's habitation, & discovered first

Must rats were

an upper chamber with a passage way leading to one just below it & then two more tunnels to the base of the structure. I think their summer residence is somewhat differently constructed from their winter one.

Argynnis cybele

I opened this same nest several weeks ago but today it had been repaired. June 18th First specimen of Argynnis cybele seen.

Eudamius lycidas

June " 4th vacation day. Devoted 1st the catching & observation of insects. Collected several new ones to the island, particularly a dragon fly. I again saw a specimen of Eudamius lycidas, but as it was in a thick growth of bushes I was unable to take it.

Geometrid caterpillar

I found that a small Geometrid caterpillar walking up a maple tree, went about 2 ft. in 1 minute.

Argynnis cybele

The caterpillars of Anas archippus are about one in. long & seem to be numerous. Argynnis cybele is becoming numerous while the specimens of Militaria phastor seen in the wing are very scarce.

Perithemis domitica

Most of the Dragon flies have now become plentiful & between the specimens of big Anax junius & little Perithemis domitica that go flying by, one ^{sometimes} sees a

"darning-needle" that it would be a joyful thing to catch but alas, how hard it is to capture the creature.

I should have noted on June 21st that I saw a specimen of Pholisora celtica Friday July 3rd 1885. The Exchange road this a holiday, so I went on a tramp.

This time I was more fortunate with Eudamias lycidas than I have been on previous occasions this year, for I caught the specimen. I took it in the same place where I saw the specimens spoken of on June 10 + 27th, the one seen on the 21st was on Ocean Terrace Road. From the circumstances I am inclined to believe that it is the same butterfly that I have seen on all occasions, for I have before observed Eudamias tityrus linger about a certain pathway in a growth of tangled cat-brier.

I suspect that the cow-bird sometimes lays its eggs in an old nest, for today I found ^{one} ⁱⁿ a vireos nest, which was evidently of last year's making.

I identified the song of the Cardinal bird & saw a flock of Cherry birds (cedar birds), ~~and~~

Chicadee

James Raymond, some time ago, found a chicadee's nest in an old apple ^{tree} limb, & today I saw a number of young ones being fed by the old birds.

Amuritis ursula

Amuritis ursula is abroad, as is Anders

Hadena arctica

arctica

Swallow's nest

When Jas. Raymond & myself went out (June 20) together we found a swallow's nest ^{eggs} down a well, & he has since got out of it. I should have also noted on the

Song sparrow's nest

in the side of a hay stack.

21st of June, that I discovered the nest of a Song sparrow placed in the side of a hay stack.

Saturday July 4th The Raymonds & myself went out Richmond ward. Charles found

Golden-crowned thrush.

a golden-crowned thrush's nest almost the first step taken. It had three eggs (fresh) in it, & the nest was built on lower ground than I have usually met with them.

As James & I were walking side by side along a wood path, he picked up the upper left wing of a 17-year cicada, that some bird had evidently torn off of the insect. This indeed was a grand find, for it proves that they were on Staten Is this year, & it shows that we have had them here, more or less numerous, on all the occasions when they have

17 years later

been in the neighboring regions. In 1877
was the great brood that-covred our
Island & again in 1881, when I appear
to have been the only person in N. Y. State
to have reported them to the Entomological
Society. They were not numerous on the Island
in that year (see back notes). This year
they occur on a portion of Long Island
& also in Pennsylvania & my capture
of the wing today, shows that a brood
in mid-July or two, must have emerged
on Staten Island.

Woodcock &
insect net.

As we were walking on the edge of a
swamp in the thick woods, Joe Raymond alone
stepped on a woodcock, but the bird did
not fly so I with a sweep of the
butterfly net captured it. We then
set down and examined it very carefully.
Starting with the head we were much
surprised to find the eyes situated so
far back & when we smoothed the feathers
on the back of the head it gave it an
very comical appearance, with its long
bill, large eyes & small occipital region.
He spread out its wings and examined
its toes & finally set it up on Glas.
Raymond's knee, when it flew off with a
whir. It was a bird of this year though full

ground. There seem to be a great number of these birds on the Island this year for on every ramble I shoot several.

Under a bridge
Near the end of the manor road & on the one that comes from Egbertville we met a Baker & purchased a number of desiderata, or you might call them pies, buns bolivars &c. As it commenced to rain we retired under a bridge and ate the desiderata.

A little dog & a little story about him:
I met a little dog in a field as I was coming home, and he had found the wicker-work belonging to a defunct den-john, and it was a grand thing for this same little dog to play with. He got up on top of it inside & underneath, and then ^{as if} ~~this~~ would bounce & jump as if imbued with all the powers of an organized being. Now the little dog gets up on top this queer jumping monster, & now the little dog binds himself sprawling in the grass, he loses a moment when grasping a stray protruding stick makes off across the grass towards a friendly goat, with the entire edifice clanking behind. And now a very bad little dog across the street barks at me because I don't ~~never~~ ^{never} on, and the day is over.

Ranunculus aurantiacus

Ranunculus aurantiacus butterflies & bearing their pupae skins for today I found one on a wall along side of its chrysalis.

Sunday July 5th. Arthur and I went out today for a walk, confining our selves to the valley of the Clove.

On a tree we found three young screech owls sitting close together & on an adjoining one sat the old bird.

A chimney swallow's nest & one of a song sparrow rewarded our efforts in that line. The song sparrow's eggs were fresh, & the nest was built on the ground.

We found that something had eaten up the young Great crested fly-catchers ~~young~~ that belonged in the nest, placed on the ground, in a hollow tree. This nest we discovered several weeks ago & today only one leg of a young bird was to be found.

In a field grow a number of Canada thistles, the buds of which were just showing a faint color of purple, yet on a heap of material dug from an iron mine, the thistles were in full bloom. I think there must be 5 or 6 days difference between them.

Monday July 13th 1885. On Saturday I
went to Croton on the Hudson, to see
Mr. Page, who is employed on the new
"Croton Lake" as surveyor. As he was not
at the station, owing to my having come a
train earlier than expected, I started out
to find him some 4 miles back.

Echinum vulgare The first thing I saw of interest was
a plant of *Echinum vulgare*, which I found
some time ago at Kreiserville. Afterwards
I saw many specimens.

Kingfishers Kingfishers seem to be numerous, for
I noticed several holes in the bank,
& from the R.R. car I observed many
small tunnels in a cinder, which must
Sand swallows be the breeding places of the sand-
swallows.

As I was about to cross Quaker bridge
on the right road for a boarding house
where I was told some of the surveyors
resided - I met Page. I had made
about 1 1/2 ^{miles} & had made all the turn-
ings correctly of the ~~main~~ ^{main} cross roads.

The next day (Sunday) Page, Mr. Turnbull,
& myself went out on a tramp, first
to the present Croton lake, then over the
hills to Dixy valley or Hunters brook, so

home. From series of the hills we could see the Hudson in the distance & the numerous orchards (in which there are quantities of birds nests) stretched out below us made a very pretty scene.

Idalia for the first time this season. They make here a drink out of yeast & milk, called "Kumys", which is not unpleasant, and even baby has his cider & is. Among insects, I also heard many specimens of a Conoccephalus stridulalis, I think it was unique. I also heard an Oecanthus vociferans but I have not heard any since.

I heard towards evening I heard the first House Wren of the season.

Orioles, two breeding are still about.

Mr. A. C. Wells reports to me the capture of Penicillia larginella F. on Staten Island, on June 21st.

Saturday July 18th - 5th vacation day.

I went to Elm Park today on the steam boat, as it is exceedingly warm. Among the beautiful clumps of sweet briar, which grow in such profusion about 1/2 mile from the boat-landing, I saw a few interesting objects. By the road side I took a Theda

Conoccephalus
Oecanthus

Cicada

Orioles

Penicillia

Theda

Lycena!
Pholisora
Limenitis
Grapha
Buxus and
Vespa

Blue bird

which must be Humuli, though at the time I thought it was another species. Lycena conyctus is abroad as is Pholisora catullus & Limenitis arctus. I also saw a Grapha. I think interrogans the first one seen this summer. I caught a Buxus that had seized on a species of wasp (vespa), and was gnawing it about in its mandibles. The blue bird always strikes me, as I walk along the hedgerows, as an exceedingly

Its note is so cheery. I have noticed but very few of them in mid-summer as compared with the numbers in spring.

Yellow bird

Yellow birds (Histle finches) are very numerous just now, especially in the part of the Island where I was today. It was actually so warm that the birds would stand with their mouths open and I noticed a number of geese who did the same thing. The yellow birds, however, seemed to enjoy the heat. Sunday July 19th 1885. I went to the Long Harbor woods today when I remained under the trees & in the bushes until it was time

come home.

Rhus glabra The flowers of *Rhus glabra* are now in full glory, & great numbers of hymenopterous insects frequent them. I do not know that I have ever seen so many carpenter bees (*Xylocopa*) together before, & honey bees were also numerous.

Idalia butterfly I saw the first *Idalia* ^{butterfly} today, of this summer, that is, the first one in the island, for I secured a specimen at Coquina. Now that I am acquainted with the song of the cardinal bird, I hear them quite often. The bird, however, keeps at a distance, and it must be quietly approached in order to be seen.

Often times while I have been looking at insects or plants in the woods, or have particularly staid about one place, a little mangland-yellow-throat has come quite near to me & commenced to act as if it had a nest in the vicinity. On several occasions I have looked for this supposed nest, but never succeeded in finding it.

Today one of these birds acted as described & kept it up so long that I staid

a stick at it in order to drive it away & restore quiet, so that I might inspect the Hymenopterous insects on the elder blossoms undisturbed. It did not leave however, & I in despair of getting rid of the little beast left for another place, walking at first fast & then slowly as I came to some *Sium* flowers. In a little while, I heard the

Maryland
Yellow throat

bird coming, screeching madly, as it hopped from bush to bush, until it finally reached a position near me & scolded us before. I moved off now to see if it would follow which it did & I succeeded in driving it several hundred feet from the place where it made its first attack. I have therefore come to the conclusion that they seldom have a nest to protect when they act in the manner described, or at least the nest may be very far away from the bird & yourself.

I should have started above, in connection with the observations of the Cardinal bird, that I found a nest which I am quite sure must have been built by one of these birds. This makes 3 the nest to me this year.

24 1887
Saturday July 28th Vacation day 6

Catch the gay butterflies while ye may
for a day cometh in winter time, &
no man can catch butterflies.

I followed out this plan today in a little
swamp near Silver Lake & captured some
choice insects. They are not very abundant
this year, in fact I have seen but one
kind of Papilio & that was turnus. In
this little swamp, however, there seemed
to be quite a number of desirable
ones abroad. I captured two beautiful
specimens of Argynnis Italia, also A.
myrina. A. Cybele was observed
in copulation, & the ♀ specimen secured
for the purpose of seeing if she would
lay some eggs.

Hesperianus A number of Hesperianus were taken
& I came in hopes that one of them was
Neonympha brood new to the island. Neonympha
canthus is to be seen in considerable
Physiodes numbers & Physiodes Pharo is at its
~~most~~ period of male number.

Hyemoptera I got several species of grasshoppers &
several new Hyemoptera insects to my
collection.

Logan's spring Logan's spring brook & the spring itself
has dried up, though here & there some

1885

Character of the

is a small pool of water remaining. When I started out this morning the water was dripping from the trees, the clouds being heavy & it was extremely warm, such a day in fact as the sea coast - a place where moisture abounds - can only have.

Conocephalus

I should have noted on July 22nd that I heard the Conocephalus ensiger in the garden, but they have come to roosting a few days previous, for on a short walk this same evening I heard some.

Saturday August 1st 7th vacation day.

Neonympha
Physiodes

I went to the same swamp that I visited last Saturday in the hopes of seeing some of the same Hemipterans, but I was disappointed for there were but very few abroad. Neonympha cantuariensis D.P. tharso are fast disappearing, I only saw one Neonympha, & but few Physiodes. We noticed several dead butterflies on the milkweed flowers (mostly small species) that had evidently been captured by the fangs & the spiders that lurk in such places & in one case a Hemipterous insect was

butterflies &
spiders

Pauphila & sucking the juices of *Pauphila* sections.
spider
L. disippus saw one specimen. *Norman's* *thysbe*
Norman's is also flying

Blue birds & King birds are becoming
common now, I suppose they have
come mostly from a little further
north.

House-wren

The house wrens left their abode
in the garden several weeks ago &
I now see this bird in the woods
quite often, so I am inclined to
think that they desert the garden
for the woods, at least for a time
before going South. (Or it may be
that the birds I see are on their
way south, where the ones from the
garden have already gone though I
remember that Abbot says something
about their staying most of the year
round in his locality.

One day this last week about 5 P.M. I saw a most beautiful
orange colored *African*, but it escaped
among a clump of cat brier & was lost
to me. I have never seen the insect
before in S. D. though I remember it in collection

African

1898
Sunday Aug 2nd. C. W. Lenz and I
went out today, and observed insects and
harvest apples in the neighborhood of
Jewett Ave. He captured quite a
number of Cerambycidae by beating the
dead branches of trees over & shot, the beetles,
falling on the white cloth & being easily
seen. Near a little pond, which was
made on the side of an excavation for
iron ore, & which was surrounded, by
a species of Equisetum, we captured
many specimens of Onophorus. This was
accomplished chiefly, by pouring water on the
banks, but also by disturbing the surface
of the ground slightly, in the vicinity of the
Equisetum stems. There were also many
other beetles & a very queer Hemipterous
insect was found in the ground about
this same locality.

The Clematis is in blossom & the Rhus
glabra heads are of a beautiful crimson
color.

Thursday Aug 6th. I went out to the
little swamp near Silver Lake this afternoon
and was much interested in looking
at the insects dead & alive on the
Asclepias that grows in such places.

On Aug 1 (as I noted) I found some butterflies

Onophorus

Clematis

Rhus.

Dead insects dead on these flowers (E. americana. P. parviflora or Asclepias & A. myriophylla ^{was} found dead by a friend whom I met). Today I looked particularly for these dead insects & found a fly, & two Hymenoptera, one a large Crabro.

This is caused by the numerous insects that reside in these flowers, & wait for the passing insect that is weaker than themselves & also by the peculiar structure of the flowers which hold the insects by the legs. To night comes on, I found many insects asleep on these flowers, particularly Hymenoptera - & today I noted a Dry Myzine, a Bombus & several smaller bees.

Phyllophora

Phyllophora reticulata is abroad, I having heard them this evening for the first time this year.

White-bellied Swallow

The white bellied swallow is now in flocks & may be seen perched on the telegraph wires along the road.

Day of Gen. Grant's funeral Aug 8th

I went to New Dorp station today & so on to Crook's Point.

A new S. I.

Hesperian?

(P. maculata)

I took two specimens of Hesperian that I do not recognise as having been seen before. The insect is dark brown on upper surface, one of

the specimens having a few yellow spots. On the lower surface of the second pair of wings is one large-irregular spot.

Ant lion

I saw the same ant-lion on Crook's Point as I caught on Covey Island last fall, but the specimen ~~de~~ off before I could capture it.

Ant washed

in the Meadow

Masses of peat, weighing many pounds, have been washed a long way across the meadow by the great tide of last fall. On these

Ants in Salt

Meadow

same salt-meadow, and a long distance ($\frac{1}{4}$ mile about) from the up land I find many ants & their nests, and I also found a ~~large~~

Ant

The white-bellied swallows are in & in places the "max-berry bushes", on which they nested, were blue with their pretty

The meadow

has

Sunday Aug 9th 1885. Today Koolick and I went out walking, and finished up at "Fair View Cemetery".

Neorhyncha canthus is still flying; I saw one specimen. Limnitis diaphana & L. ursula are also abroad.

Uta ferox is flying, and I saw

Quercus longipes

one specimen of the large Quercus
I took several years ago & have
supposed it to be Sp. longipes.
It has a brick red abdomen.
While we were picking buckberries
I found - a very fantastic caterpillar
feeding on the wild cherry.

Quercus californica

This caterpillar was
a chrysalis the day
after I got it -
& it hatched on
Aug 22nd producing
Limnephila larvalis

It had two long black horns
& was mottled with brown the ground
color being lavender.

Insect trap
in the woods

In the thick woods & on a platform
we found (for Hollick had discovered
it last Spring & showed it to me
today) an insect trap. How did not
know what it could be & brought me
to look at it, as we were passing in
the vicinity. Evidently some careful
collector has been in the locality.

U. f. f.
parent with
young

Where the trunks of two trees rubbed against
each other a cavity had been formed.
In this we found a flying squirrel
which we caught - in the insect-net
& the hollow contained six young, only
a few days old.

U. f. f.
parent with
young

In Clare valley we found several
plants of ^{multicaule} white albino flowers, & near
Bradley's road is one of the largest
of this plant that I have seen
& will be glad to visit for insects on occasion.

62
retaining as much moisture about the roots as possible.

Most of the insects, or at least a great many, were such as I have not seen at home, but I took a few dragon-flies that do not occur on Staten Is. Tannophyes bella, & two species of Diplosa can be included in this list.

Adipoda succola & A. maritima occur far back from the river in the barren fields, (rare berries grow in profusion, and in one of these swamps I captured a species of Orchelimum that I have never seen before. It has a red face or front. Papilio Turner & P. Troilus abundant.

At this season the huckleberries cannot be gathered in any quantity, they are so plentiful, & the "Huckle" black-berry also has good fruit. There is also a trailing black-berry growing at Twin River that I have never seen before.

Coming home on the train we noticed great numbers of nests belonging to the fish-hawk, & many of them had birds sitting on their sides. They looked to us to be young birds.

I saw a "Brown Swift" one of the lizards, running up the side of a barn, & at

Orchelimum

Papilio

Fish hawk

Brown swift

the pond, where we collected so many plants, I captured one, that jumped from a dead limb & tried to make off.

Kati, did

"Kat-dids" are ⁱⁿ numbers now, I have heard them for some time on the Island & they were plentiful at Pius's River.

Wednesday August 19th. Pius's River trip found too much for me, and I have been unwell ever since I came home. I think the cause ^{was} eating things that I had better let alone. Today I stayed home, being sick, & will thus spend, at least, one of my precious holidays.

Hemaris at the wing

Hemaris thysbe always seems to me to be no more than a gay & sportive insect flying from flower to flower with no object in view than individual enjoyment. It appears to have a definite object. It flies from one blossom to another, ^{like a bird who has come to call for} though I have noticed it best in beautiful sunshine on burnished leaves. An idea suggests itself just here, and that is may its larva not feed on this plant?

Leitophila

chased by sparrows

I saw a Leitophila chased by sparrows (English) the other morning. The sparrows were unable to catch it.

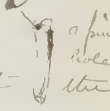
the foolish thing flew round & round.
Unfortunately it ^{was} approached to near &
disturbed the birds so the moth made
off without my seeing the whole of
the interesting affair.

The English sparrow's catenary abilities
extend to very large insects, notably horn
flies, & today I saw a sparrow catch
a ♀ Cicada by the wing & hold it until
the main rib was broken, where the
poor insect could not fly. I threw
it ^{to} ~~at~~ the beast, & made it let
the Cicada go.

Emocephalus
robustus?

That big Emocephalus that I have
marked robustus is now at home.

Saturday Aug 22nd. On Aug 6 I
found a caterpillar of Danaus archippus
on the Asclepias that grows in the swamp
& brought it home. It made a chrysalis
in a few days, (2nd I think after getting it) &
as soon as it was hard enough I
removed it, & mounted it on a pin
as I wished to preserve it for the col-
lection. On Aug 21st this chrysalis was
a very dark color in the morning &
at evening I found the invargo had
appeared, but was of course unable
to get away as the pin passed

through a portion of its body, viz. the
second ^{or 3rd} segment of the abdomen, as
far as I am able to make out.
It does not seem to be but "skin
deep", or in other words the pin does
not enter the abdomen in the
center of the segment but moves
towards the ventral surface.  a pin
hole
the
insect is greatly deformed.

Baltimore Ond. 1st Aug 2. I heard a Baltimore Oriole & several
days previous. I also had my attention call-
ed to one, by hearing its well known note.
Aug 25 Tuesday. To look out of the window
~~now~~ we would hardly think it was an Aug.
Summer Storm day, it is so cold and stormy. The wind
comes in through the cracks in the window,
& the ships in the bay lie to the blast of
the summer storm.

Thursday Aug 27th 1880. Yesterday and today
have been very cool - for Aug. and snows
can be seen on many people along
the streets. Fall will soon be here
with its dark though beautiful days. The
grapes are now turning purple, & the
great mullein stalks in the woods or waste
places are brown & aged, yet it will

be their lot - to show their heads above
the winter snow when the plants green
today will be undistinguishable among
their dead-brotherhood.

I noticed yesterday great numbers
of Danaus archippus as the boat sailed
down the bar and there were also many

White-bellied
swallows

Chimney swifts

white-bellied swallows & one chimney
swift - flying over the water. Along a
road, as I walked out in the afternoon,
observed many Danaus or monarch but-
terflies on their slowly moving wings, &
in one place I counted 20 flying about
several-trees. All seemed to be flying
gradually in one direction, towards the set-
ting sun.

What a joyful thing it is to be in
good health & what good fortune have
I had in this particular of late! At
this moment I have the head ache peculiar
to a deranged liver & see clouds & specks
floating before my eyes. The pain in my
right side is not so great as it was,
it is true, and therefore thanks to
Pandora for shutting her box so quickly,
I have hope of being yet well.

7. 1881

Somewhat the spring birds always seem to me like the meeting of a friend, one so like pleasant a few words a state of the land, and away whences the birds that in the all the year round become sort of friendly neighbors, on whom we can call and expect to find at home. I know a patch of woods where in a crow builds its nest, an old pear tree where a blue bird raises its brood in spring, and an ancient hollow apple limb where a throat of the hand will detect the presence of a little screech owl. On my long winter tramps along the sea shore I meet the crows looking for cast up treasures & who will say that these are not the same birds I knew in summer time? Their success as treasure hunters is greater than mine, often times for many a fine "Lady's ear" or "Decorative" have I seen, and signed for the lost leg, the missing fin, or may be nothing but some of the walls remained of the once perfect creature.

However, the bird was hungry, and I ought to be willing to sacrifice a "Decorative" to such a cause. But there

the black vernal might have eaten
a little more of that "Horse-foot crab",
if not of the creature from whence it
gets its name, and left the secret
for me, as the agent of science on
this shore.

I hear the blue bird call its
chief note ^{the days of} on my winter walk,
and the owl is at home in the
day time, though he spends his evenings
out of circumstantial evidence in
way of departed mice go for anything.

The chickadee is also a home bird,
a bird of our dark winter days, and
many a time have I seen it holding
wood-pecker like to the small branches
of some sheltered shrub, looking for the
insects or their eggs that are hidden in nooks
& cranny.

The animals that live about one's home I think
will always remain higher in the scale of
personal interest, for the same reason that
the few denizens of a bleak cold land
are much more studied, ~~or much~~
and cared for, than the vast host of
beings of a tropical shore.

Sparta Aug 31 (Sussex Co N.J.). In a second story small room, in the front of a small house on Meadow St., I find my self at the present moment. That troublesome liver of mine, has brought or sent me here, to try if possible to cure its ills. I walked about a little on Sunday in quest of natural objects, though that awful rain, that Hawthorne complains so frequently of, kept me housed, or piaggized, in the morning.

Papilio cressphorus, Argynnis cybele & A. idalia are abroad & flit about among the golden rods, & golden apples that lie so plentifully on the ground.

I am pretty sure - for I have carefully listened to them - that the common Cicada here, sings on a little ^{different} key, or note from ours of Staten Island. I have heard a few, that remind me exactly of those at home, but their song is not as frequent as that I have described. I have one that was taken at Sparta & it is exceedingly small, as compared with that at home. (Cicada canadensis)

I found today the pitcher plant growing in a swamp. I was not aware that it was so common here.

Sparta
N. J.

Papilio
Argynnis

Cicada
(different species from
the one common in S. I.)

Pitcher plant

70 1895

... came on among the pines southward.

I strolled out ^{to the} along a road that I had never been on before, & by and by came to a church. In the window there was a light & the sound of voices denoted that some one was therein. I drew near, across the open lawn & peeped in the open door & observed a few gathered in a small room to sing praises unto God. But they stopped shortly & I scampered across the lawn lest I be caught as a spy at the door of the sanctuary.

A church
It seems that the fitting place for me in society, is to be an observer, rather than an actor in the pleasures & businessess joining my about me. Some how I do not seem to run on the track of life, in the same way that so many of those about me do, but find the greatest pleasure, the fullest share of happiness, not in the gay parlor, but in the quiet chamber, in the small street.

Santa Sept 1st. I walked out this morning with Mr. Osborn & just where we went I cannot say for I couldn't go over the same track again. It was towards Lafayette that is we finally went.

Sparta
N. J.

out near that place. I did not notice
any thing in particular, except some
very beautiful hills, or perhaps I
may call them mountains. The country
& particularly the swamps by the way are
beautiful with the flowers of fall.

Along the
Meadow road

In the afternoon I went along the
Meadow road to its end, $3\frac{1}{2}$ m. from
Sparta. I found some splendid
apples & met ~~some~~ two very nice
dogs, with whom I played. This same
Meadow road, by the way, is the prettiest
one that I have been along, with its
stretch of farm land & the Meadows
or Brier range of mountains on the
right. Then an easy fine clear
brook coming from the hills on the
left & flowing across the road down
to the great brook in the valley.

Rattle snakes
& copperheads

I talked with an old man (who
was fixing the road) for a long time,
& he told me many interesting things
about foxes, snakes & opossums. He
says that rattle snakes are not very com-
mon now, but that copper heads are quite
plentiful. Then the men go in the morn-
ing to now, they carry onions with
them & when better they find some in

and then up to the house. The
 hole was of a size of a finger that
 had been bitten out of a wall that
 was made of the same bit through
 the hole. It was a ticked the same
 house and as the hole was shagbark
 down to the floor the end being the
 difference in the other leg, & it will
 be a hole to be scratched in or.
 These ants being so bad that I
 was obliged to remain in the house
 & be then felt in the back & found the
 same tooth sticking through the leather.
 I saw a little more along the road &
 he was Agrolis on a yellow road.

Common wood
 Agrolis

Today Sept 2nd. I went to Morris
 Pond today & captured a few insects
 particularly grasshoppers. I also found
 two very large ants nests, one of them being
 nearly two ft. high & quite conical. The
 do not seem to be very numerous, however
 as the days are quite cold.

Ants nests

This afternoon I walked out on the Stanley
 road & captured a few more grasshoppers
 & crickets. I threw a stone at a hollow
 tree & out jumped a red squirrel. Upon
 examination, that this old tree had
 four young squirrels in it.

Red squirrel

Thursday Sept 3rd I went this morning to look after the squirrels that I found yesterday. I supposed that the mother would carry this off & when search I found my supposition to be correct. I found a squirrel in an adjoining house. I was unable to over turn, & this was the last of the season.

Under a rock rotten log I found an Amblystoma opacum, the first one I have ever captured, they being rare on N. I. A few grasshoppers & crickets complete the list of my morning captures.

This afternoon I visited the meadows mountains & had a very pleasant time. I went through the woods & great boulders. I found a great deal of the shaped rock near the summit of one of the hills, from which I could see the country beyond. It was very beautiful & I sat long in the pleasant sunshine.

In fall of an A large scarlet oak tree had fallen from its position on a slope of granite. It had grown until its branches, leaning on the little sally wood too heavy for its roots to support.

the tree fell. This is a case when a
tree over-rotted inside.

A red squirrel up in a tree, made
a noise more than I have ever heard
one of the beasts make before. It
shattered for a long time & there seem-
ed to be considerable in what he
said. If the variations in tone & man-
ner of any thing in squirrel parlance.
I have never seen to be about
a squirrel in any place to amount
to me this.

Phyllotera
high in
I captured Phyllotera new to me
& also Hesperia butterfly unknown to
my collection.

Phylos
Arctic ringo
Phylos there is still abroad, as is Arctic
ringo.

Friday Sept 4th 1885. This morning I walked
on one of the roads, & lay in the
warm sunshine for a long time so pleasant
was the day. There was a great black-
& yellow ichneumon fly, the name of which I
have forgotten, that I watched with
interest. It flew from one white-birch
tree to another, inspecting every limb with
care, from the top to bottom,
& then flew to another. I was

fortunate enough to see & discover
a caterpillar. Finally it put over
a fence & away.

Aras archippus may be seen
in great numbers, floating on out stretches
wing high in the air, almost among
the swallows. It does not beat its
wings, but sails ^{inward} with them
spread in somewhat the same way
as a hawk.

Rabbit foot clover

The "Rabbit foot" clover grows here on
the hill-sides, while at home I have
only noticed it on sandy ground near
Pottsville.

Shuckleberries

I found a few shuckleberries today
though they seem to be generally scarce
in this locality.

Cistuda clausa

I observed Cistuda clausa, ♂,
eating a fungus. This specimen had
red eyes.

Rain

September 5th. Like last Saturday the
morning looked like rain & by 10 o'clock
it had come to that beautiful state
of things. Rain is all very nice &
certainly very useful, but can never
be considered a charming state for
a summer boarder. However, I am

7th 1885

A charming out & met. very charming dog, with which I had a pleasant time. I sat on a rail fence & talked to him for a long while & would have staid on that very same fence for a much longer period if it had not come time.

Monday Sept 7th. I sat on an old fallen apple tree today, in the sun & played with two specimens of Acheta vittata. I would poke them with a straw, which they would run after for a foot or so over the apple tree log, and would try to bite it when ever they could. They showed a great amount of persistence in their efforts to bite the straw, & amused me greatly.

Coming home, I watched some honey bees for a long time as they crawled over a stalk of golden rod, & I could not but wonder how careful they were to get all the sweets from one set of flowers before going to another. Between the crickets & bees I spent a pleasant morning & went home thinking how much can be learned by simply sitting still on a log.

Spartan
v. 7.

Eacles on
cedar

September 8th. This morning I walked out with the children, as I have done on many occasions, and never without their seeming to enjoy it greatly. On a cedar tree we found a caterpillar of Eacles imperialis, the first one I have ever taken on this tree. It was of a very dark green color, almost black. I also discovered a brown caterpillar on the hazel, which I think produces a trapta. I have raised it before but have forgotten the perfect insect it produces so I am now rearing this one. (It did produce a trapta)

maio

On a small cedar tree we found a Danaio which had just emerged from the chrysalis hanging near by. We later on found several of the beautiful green chrysalids, with which the children were greatly pleased.

Campers out

In the afternoon Mr. Wood (the boarder) & I went to see some friends, who were camping on the island in Morris Lake. We cut them fire wood & helped them in other ways all we could & left just in time to get safely home before the rain.

Sept. 10th - Sat. today. Mr. Wood & I went to the mill today & purchased some graham flour for Mrs. Smith, but we could not go to see the campers out at home as it rained. We, however, met them down in the village purchasing the necessaries of life, which consisted of another malaras, sundries, coffee & a few other packages the contents of which I did not enquire about. Necessaries of life - \$1.17

This afternoon the weather was pleasant so Mr. Wood & I went out along the meadow road. We found an *Ch. laevis* ~~muklenbergii~~ turtle, which I have carried around in my pocket & which at the present time is making a great noise in my wash basin. We also captured several tree-crickets, which stridulate differently from the common kind.

Edipoda

An *Edipoda carolina*, ♀, was observed laying eggs in the road, but before I observed what she was doing exactly, I disturbed her sufficiently to stop all operations on her part.

We greatly admired many pretty things along the road, particularly the

Spartan
N.S.

A beautiful
apple

beautiful flush on the cheek of an
apple which we noticed in a tree.
Our mother nature had indeed been
kind to it & made it a beauty
among apples but how much is
owing to circumstances? It was of light
& the afternoon sun shone through the
leaves on the apple, & the color
was confined to the hints of
this particular way. Its ^{special} ~~particular~~
beauty the form of it and all its
lovely leaf would have made
its beauty a slightly inclined
down but blessed it on a level
with its less fortunate companions.

Friday Sept 11th. Saturday was stormy
so the outing amounted to a very
short walk. Today was fine however,
so we walked to the Meadow Mountains.

A red squirrel sat along the road next a red squirrel
on a wall. For about $\frac{1}{2}$ hour I stood
and watched this squirrel and listened
to its chattering. It stood on its hind
legs for a long time, keeping up
all the while the jerking movements
of its tail & other demonstrations of
its uneasy mind. It was a mother
& no doubt had a nest in the vicinity.

In the mountains in a hollow tree
I found a flying squirrel's nest which
contained only one young & that one
young indeed. The mother flew to
me and came close & I looked in the
nest which was composed of chestnut
oak leaves in their green state, and
also a little dry grass.

Agrymnus

Traptā

Chesnut

Agrymnus Cybele is still flying, &
Traptā ~~cybele~~ was seen on the 9th.
Chestnut oaks are common here with
some of the varieties.

This afternoon a number of the
children went with me to Morris Lake.
They got a great deal of cedar at the
mill all of which they drank, but
what I had thrown in the pond but
they should get too much. They took
off shoes & stockings & was a good time
in the water, as indeed I think out
of it.

Crane fish

In the lake we saw a Crane fish, & one
of the same fish with a black spot on
its gills. ^{It captured} some grasshoppers of value
& also two species of Aeschna.

Aeschna

Sparta, N. J.

This ends my Sparta trip, for
I start for home on the morning trip.

1885
S. 9.

Sunday Sept 17. I noticed some small
things in the morning, and think they may
be going south.

One was taken from the nest on a branch
of a tree in the garden. I saw it
fly. It was very small.

On the 28th, the cat about the house
has become a nuisance on account of its
viciousness, was taken to the vicinity of New Dorp
in a basket, where it was set at liberty.
On the morning of Sept 7th it was lost
in the place where I suppose has left
it since. It is truly wonderful how they
can find their way, for this poor bea-
traveled about 5 miles in a direct line,
& I suppose 60 or more by the road which
she took.

Sunday Sept 20th. Today has been
nice warm & sunny, one of the kind
which make our autumn so pleasant.
I was out in the sun-
shine this morning, watching a wasp nest
built in the English ivy. Though it was
so warm, yet only two wasps left the
nest and two returned. The insect
there is nearly spent as regards the season.

Saturday September 26th. We have had some very cold days, & the frost touched the Lima beans slightly a few nights past. Just at present, however, it is warm & I am writing this on the piazza. I have great hopes for the morrow and its work.

On one of the cold afternoons I have spoken of I saw a cat-bird, a very decayed looking one. It was getting dusk & cold and this poor bird seemed in no way desirous of moving his position when I approached, nor did he seem with all his feathers ruffled about him.

I have noticed before how Katydids stridulate in the daytime as late fall, or the end of their days, approach. This same observation holds good in the case of *Phylloptera retinere*, which I have heard for the past half hour in the garden, it being now 5:15 P.M.

Monday Sept 28th. Yesterday was a charming one & so has been today; but yesterday was one of pleasure while today I toiled, & lost all the sunshine & pleasure of happy walks.

(Hence the ... I saw ...
 ... I went out to pick up
 the ... that had fallen ...
 ... was ...
 ... when the ...
 ... attached ...
 ...

Some ... birds

I think the ... through ...
 ... the ...

... the ...
 ... rather station.

H. ...

... in one sandy
 ... place where ...

Heliothis modesta

... *Heliothis modesta* ...
 ... least ...
 ... they are not ...
 ... this occasion ...

A great number of butterflies were found

Papilio ...

P. ...

Chenink

Fish ...

... was

Papilio ... & *P. asterias* being among the
 number. The Chenink can now & then
 be heard, and the high-hawks, from
 the New Jersey coast - are quite numerous
 high up in the air over our Island.

I found a lappet-moth, which had
 just issued from the cocoon beside
 it, on the same stick.

Indian imple-
ments

Concepcion

He used and

A raspberry

fields I found two sinker stones & a hammer
stone, but I did not look a great ^{while} for the
others is too long to make it a success.

On Ward's Pt. I captured three large
Concepcionids, of which I do not know the
name. I have always found these sandy
points & spots, such as Cape L., Crook's Pt.
&c., to be very good hunting grounds
for various species of Concepcionids. On
this same point, we came upon a
Hogned snake, which burrowed in
the sand as quick as he could, but
we pulled him out by the tail for
inspection & then let ~~him~~ ^{him} go again.
It was quite a large one, & I have no
doubt that they often slide capture or
escape by the same means.

All the time of our journey we have
not yet gone, for we picked a rasp-
berry ~~and~~ ^{and} a few days past I found several
black berries, on our bushes in the
garden.

This was one of the happiest trips
or outings I have had for a long time.

1886

Sunday Oct 3^d. Arthur and I went ~~down~~ to Pottsville today, but started late on account of its threatening character.

However, when we arrived at Pottsville it was bright & warm but before we had gone far it commenced to rain, & finally it rained very hard indeed. We got within shelter of some small trees, but there came a dizzy flash of lightning & clap of thunder so near at hand that we took to the open road. We hurried in a barn & after it had cleared up a little went in search of Indian implements, & the next best thing to. We found a few of the old style though good ones.

White bellied
swallow

Cat-bird

Dana's

Cicada

Wasp (repa) and

Eng. Sparrow

The white bellied swallow is yet abroad as is the cat-bird & meadow lark.

Dana's archippeus is in considerable numbers still, & so are some of the other butterflies. I heard a Pieris singing in the morning when the sun was out, & a friend gave me a Gaspit moth. A wasp was observed netting a small English sparrow.

Sunday October 11th. This has been a lovely
Indian Summer day & there have been a
few people in the woods since morning,
who have certainly enjoyed it.

T. Britton, Mrs Britton, Arthur T. J. went to
Crest House Station today, & collected a
great quantity of shag bark hickory nuts.
We shook them off, threw clubs in
the trees & by various means managed
to get most of them, but then we got
between one & ten bushels of nuts. A
few must be devoted to the squirrel
& the rest to our rodenticum jaws,
in the shape of 'the nut cracker.

Sugaring notes The following "sugaring" notes are very
fragmentary but may be of use when
taken with others of the same character.
Abroad on July 21 *Geocopteryx libatrix*, *Catocala*
grynea, July 28, *Mamestra trifolii*, *Parallitis*
bistrifaria. July 27, Sugaring Wood. Houghston
(the bird we saw) *Geocopteryx libatrix* (3 specimens),
Catocala grynea in numbers. *Mamestra trifolii*
in the morning took an Egyptian as one of
the sugared trees. July 29 *Catocala unguis*
July 30 *Catocala ultraria*, *Aeronautes americana*,
Leptopygia cylindroides. Aug 6 *H. cylindroides*

88 1885

Hedraea spulatrix, *Lophygama frugiperda*,
Aug 20 Noctuids very numerous at sugar
but of common species.

Aug 21. Great numbers of moths at sugar,
counted 35 on & flying about the trees.
Parthenos nitidis, *Agrotis bicarinata*, *Catocala*
albolinea, *Heliopha unifornis*.

This "sugaring" was performed in the garden
at New Brighton.

On Aug 29 I went to Sparta & through I
have sugared since I have not made any
note of captures. It has not been a good
year, however.

October " Today while it was yet
very light, I saw a red-bat flying about,
and a little later another poor bat that
had torn its wing.

The days are very beautiful now, a calm
haziness hanging over the bay making things
in the distance look quite mysterious. How
too bad it is to be shut up in an
office & not see much of this beauty, &
how exceedingly sorrowful is the thought of
dying & leaving all this behind. To
think that while you are dead & cold
that there will be fine warm days in
Spring & Autumn when the first saxifrage
will bloom & the first chestnut-burr will

Red-bat

open that a little yellow dandelion will
grow close to the bottom board of a fence
in the sun, and that all nature will
be just as beautiful, just as charming
as you have seen it, but that you
will never see it again.

Eternity is a great word - , though rather
a small one in extent of letters, a
great word to convey, no matter what
his hopes or what his fears. I sound
eternity, eternity - it echoes from the
walls & brings me back eternity again.

Again this this seething foam runs strong
between the boat & the piles, & then
are many or large bubbles & countless
little ones. Does not this represent the
life in the great cities, in the exchanges,
or even ever else you will, are not these
great bubbles like so many great men,
great men of all kinds of fame who
live in a whirl with many lesser men
about them? The bursting of these
bubbles is often very sudden, indeed some
of them remain in their glory a few
seconds, which will represent the
politically great men.

And lastly all these bubbles, both great
& small, & bubbles of all intimacies

86 88
Austrian spitting, *Lophogonia frigidula*,
Aug 20 Noctuids very numerous at sugar
but of common species.

Aug 21. Great numbers of moths at sugar,
counted 35 on & flying about the trees.
Parthenos nobilis, *Agrotis bicarnea*, *Catocala*
ultronia, *Helioptera uniformis*.

This "sugaring" was performed in the garden
at New Brighton.

On Aug 29 I went to Sparta & thought I
have sugared since I have not made any
note of captures. It has not been a good
year, however.

October 14th. Today while it was yet
very light, I saw a red-bat flying about,
and a little later another poor bat that
was.

Red bat

The ferry boat comes into the dock & first
the little wave boat on the side of the
pier, then the wheels are revolved and the
surface is spread with a seething foam.
Then are great bubbles & there are little bubbles
& there are bubbles of all intermediate grade
& one may observe them to the different
vocations in life & the various kinds of men.
In one place on the broad open the
bubbles are only of moderate size but

they last a long time & float quietly on the surface, and are these not symbols of farmers and clerks, who occupy rather a quiet station in life?

In a little nook under the dock there are a number of bubbles also of moderate size, but they lead a rather uncertain existence, & are often dashed against the rocks that are numerous there - these represent the shop keepers & all such as start out in a humble way on their own account in this bubbling world. Again this settling foam runs strong between the boat & the spiles, & there are many very large bubbles & countless little ones. Does not this represent the life in the great cities, on the exchanges, or when ever else you will, are not these great bubbles like so many great men, great men of all kinds of fame who live in a whirl with many lesser men about them? The bursting of these bubbles is often very sudden, indeed some of them remain in their glory a few seconds which will represent the politically great man.

And lastly all these bubbles, both great & small, & bubbles of all intermediate

grades burst, and looking about you
can hardly see any thing to the memory
of ~~the~~ being.

Katy-dids

Saturday Oct 17. I walked out this
afternoon, as I ~~was~~ many afternoons
for I sit still entirely too much.
The Katy-dids are still alive, for
I heard two stridulating.
Every tree is touched now with
the brightest colors of Autumn, & I
stood for a long time just as
it was growing dark, looking at
the glory of a little scrap of field
where the young growth was only a
year or two old. The white birches
in some places were yellow (as were the
beeches); while in others they were ^{still} ~~of~~ a
bright green. These surrounded
by the always beautiful sweet-gum
& the sumach of vivid red, along
with a countless number of other
little trees, particularly dog woods,
made my picture.

Roasted acorns

I collected a number of acorns
of the white-oak, on one of these
afternoon tramps, & roasted them
in the corn popper, but they were
not good - not as good ^{as} when raw.

Sunday Oct-18th. The day cleared
up this morning, though it was still
cloudy, I started out for the chestnut
trees, for the wild flowers, the stray
cricket & what ever else I might
see & find. Off of one small
tree I hooked a number of chestnuts,
& I also laid in a stock of bird
nuts, though they are not shell-burns,
but they will do for the squirrels.
The chickadee is still to be seen, &
I observed two cat-birds. Swallows
are also yet abroad; I saw a number
flying over one of the ponds, high up
in the air & so was unable to
make them out. ^{as to species} I think from the
way they conducted themselves that
it was the white-bellied swallow.
Anyway they are here very late this
year, & I hope it is a promise
of a mild winter.

A few more I caught a number of poor cold
my bonnet bumble bees that I found - on
the golden-rod stalks. These I put
in my hat (for they were of the male
sex & could not sting) until they
got warm & commenced to buzz about,
when I let them go.
About 2 o'clock the sun came out bright & warm

Gulls in the bay.

Gulls have appeared - in the bay - the first one was on Oct. 19th near the Robbins' Reef light.

Sunday Oct 26 - 1888. Mr. Sherris, his boys & I went out today for a walk.

Bumble bee I found a number of Chestnuts, caught a *Bombus* bee & put it into my hat.

When bumble bees are let out their flight is very curious; they first go about in circles & are evidently uncertain of the way to go. This was the only bee seen today;

Monarch butterfly

I also observed a wasp (*Pompilidae*), & a monarch butterfly.

I was much interested in looking at a larva of one of the *Lucanidae*, tracing its circulation & I think a portion of its breathing system, which I could see through the skin.

Sunday Nov 1st. If I were asked to give my mental idea of the month of Nov, to assign to it some color, it would be to describe it as a gray, dark month. Today was a typical November one - a gray, dark day.

Rolling stones

I went out with a companion, and we first rolled large stones down a hill, and they went crashing to the bottom, looking like animated

creations as they rolled, sometimes hitting a tree, & sometimes striking another rock with a loud report.

Chestnuts were numerous and we collected quite a lot on the way to the "Crystal Water Co's" plant at Bull's Head. By the road side, the snow birds were to be seen in numbers & many other northern nesters were their too.

Swain birds

Betula nigra

(See p 60, 1883)

We again visited the three trees of *Betula nigra*, growing on the borders of a forest at Bull's Head. We discovered them two years ago about this season, but have never been there since, and it was indeed a pleasure to see these beautiful raggy bark trees & recognise them as old friends. As we were going across a field near where the birches grow, I found a peculiar hickory nut ~~which~~ ^{fruit} tree that bore long, two shelled ~~fruits~~ ^{fruits}.

~~Hickory nut~~

~~It is a variety of *C. alba* that grows commonly throughout the latitude.~~
~~It had never before been~~
~~noticed.~~ While I was turning over some stones looking for a few of these nuts, for they were mostly picked up, I discovered

Hesperomys

Hesperomys leucopus mouse that had been eating these very soft shell Hickory nuts, some of which I found gnawed.

Apples

And then the apples - those queer old fashioned apples, grown so large & without can that they have become half wild. However, this time we found some quite modern ones and in an open space - an unfenced field at the corner of two roads - a fine russet, which I brought home to Granny. All the others had been picked off, for though I looked long & carefully, I could not discover another.

Skunk

By the road side, there lay a very large skunk, which I carried to a safe place, where I will be able to find its skull on some future day. This beast had more black about it than any other specimen that I remember to have seen.

Wild pigeon

A wild pigeon flew up from a thick growth, & in a little thicket of grass

Mouse in the water.

& reeds we discovered a mouse partly in the water. We tried to catch it, to discover its species, but it ran off after we had nearly made a success of our effort.

Election Day Nov 3rd 1888. Today
was the occasion of a grand combination
trip between the Torrey Botanical Club
& the N. S. A. of S. S. We went to Garretts
& along the hills to New Dorp.

A few grasshoppers were to be seen &
Trunks captured a number of water-bettles
Water beetles & a snapping turtle - the latter being given
Snapping turtles to me. This is indeed the correct season
to capture water insects, as they can be got
now & so little else in the entomological
line can be accomplished.

In Murreaux's Valley we got some good
apples & afterwards a few wal-nuts, there
with a collection of the different species
of Hickory nuts made by some of the party,
comprised the chief finds, though I
saw a barrel or two of Autumn leaves
being taken away to decorate the rooms at
home.

Habits of November 9th. My flying-squirrel, *Sciuropterus*
Sciuropterus - "Sci" for short, sang or made a low-chattering
noise for a long time this evening. As it
was dark I could not see to time it
but I think it lasted for about five
minutes. I remember perfectly well that
for minutes when one sits & listens is a
very long time, but in this case it was

96 1885-

a very long time. Besides while in Sussex Co (see Sept-1885) I noticed this same cattering of the red squirrel which lasted for a long time in one continuous strain, only it was not so low & musical as that produced by my own "rei".

The weather

Sunday November 15th. It is getting cold now and a walk along the wood paths disclose the fact that the shallow little pools are slightly frozen at night.

Fossil Co.

Britton, Hollick & I went to Knischaerville today & spent most of our time in collecting crinaceous fossils from a clay pit. Those found were the same as occur in N.J. at South Amboy & have never been discovered previously in N.Y. State. There are some fossils here at Glen Cove L.I. similar, or the same as those found at Tottenham which have been referred to the crinaceous. There is, however, no doubt as to the proper place in the geological scale, for the specimens found today.²

Persimmons

Persimmons are just now in their glory & are indeed very good. While I was picking some in front of a little house a small weak voice called out asking me to "Please don't pick those persimmons", so I

went away. The small weak voice belonged to a darky child, & it was probably a great deal to them to have provisions when the landman failed to produce the things.

The flower
The flower
A great many grass hoppers were out and I counted a number of plants in flower, parsnip, wild carrot, clover, golden rod & an aster being some of those seen.

Something in drift
In one of the clay beds we were interested in observing the relative positions of the glacial drift, the yellow drift & clay. At the bed in question, the glacial drift occupied but a very superficial position, not being over 2 ft. thick on average, while the yellow drift was much thicker (some six or eight ft.) & the line of junction was exceedingly well defined. Below this yellow drift came the clay, which at this point was 8 or 10 ft. thick & beautifully stratified with iron colored bands & blotches. It was in this bed that we found the fossil leaves referred to on the last page.

On the way to the station we found the Kadin bed, & on the bank of the yellow drift I found a "nigger-head boulder" weighing some 10 pounds but remarkably square. It was such a good one that I took it home & it was

1885

to bring to mind the angles of a rock. People are very much like this stone in one respect - that is most people are - for the more they travel, the more they see of this world, the rounder all the angles become, angles that will stand out as bold & seemed to rub against all passers by.

Sunday November 22nd. This was a beautiful November day but a warm and pleasant one. Beutenmüller & I went out with a net to capture water beetles but we did not get many because the net was not strong enough to stand the strain put upon it, & we were obliged to be very slow in our motions.

Mr Alexander who watched us for a time in our efforts to capture some insects, had a dog with him that was very interesting. The dog into the hillside where there was a probable chipmunk, pulling the roots away with his teeth in a most intelligent manner. There he would throw at a little distance & then return the way. He found a few chrysalids and some apples & walnuts. In a small clump of grass & small bushes

enclosed a dog.

A dead robin

A dead robin

I found a robin, that from its position had evidently crawled in this secluded place to die. It had been wounded by the so-called sportsman, who might have better eaten corn than to kill twenty robins for the purpose of ~~feeding~~ their little bodies. I know I do cause great numbers of insects to give up this life, but I trust never take more than I can make good use of & besides many of them do actual harm.

November 24. Yesterday & today have been very stormy, the tide rising high on the shore & taking away much of the earth that the Reaped Transit R.R. has used in filling in.

On the flight-
gull

I noticed that the gulls, seemed this morning, to be generally coming down the bay, or with the wind; keeping rather high above the water. A few were going in the opposite way, however, & these kept close to the waves, so I suppose from this, that the water breaks the force of the gull to a considerable extent & makes flying easier when going against the wind.

Thanks giving day. November 26 1888. Today
was clear & warm at cold one, the
sun shining but a few minutes before
it set behind the snow covered hills
in New Jersey. This has been the first
occasion that I can remember, when
I have seen snow on the Jersey hills
when we have had none in our
own.

Snow on the
Jersey hills.

Hesperomys
" nests
" young

Mr. Raymond, brother & I
went out particularly to look for
mice & we found a great number,
though they were all Hesperomys leucopus
in species. Some of the nests were
in rotten stumps several ft. high,
though mostly in cat-brier-bushes.
The young are now about two thirds
grown & in those nests which we
disturbed in the briars there were
from three to four ^{young} mice each.
They, as with the squirrels, have a
full brood of young. Some of
the woods were old birds' nests
with tops put on, while others
were entirely made by the mice
and we found one that had
been built in a deserted habitation
of Urospina maculata.

Moose's nest
in that of Urospina

in nests

The materials of which these nests were constructed were various; cedar bark, birds feathers & grass being observed, it being evident that they will appropriate any thing that comes in their reach.

In the cellar of an ancient house near the Four Corners, I found the

stomach & its food.

excrement of a skunk. It consisted wholly, as far as I could make out, of parts of Acheta abbreviata, the wing covers, parts of the legs being very conspicuous. I have found these droppings of skunks on other occasions, when they had been eating grasshoppers & other insects.

highly interesting
wasp nests

A little wasp's nest also came to view it having been made by a species of Vespa. The interesting part of it being that it had not been completed, at least I came to that conclusion after a careful examination, though there is a ^{slight} possibility that the lower portion has been broken away. I found a nest in the same condition as the one described, on the stringer piece of a fence.

A number of squirrels were also seen, two chipmunks being observed running

Chapman

on a rail fence. Though I have seen
them very early, in the spring, I do
not remember having ever noticed
Tamias so late in the autumn. This,
however being a very mild fall, this
squirrel staid out later
than usual.

Gray squirrel

In the cedar trees we found
several nests of flying squirrels, one
of which was inhabited. In another
tree, with a nest in it, we found a
long individual which
into a hollow tree near by. Jas Raymond
put his hands in & after speaking about
for while, he captured the little creature.

Gray squirrel

The nests of gray squirrels were
numerous, & in a fine tree we
found one that had a young one.
It jumped out after a time & went
clipping from tree to tree & we followed
on the ground. It found an old
sassafras into which it retreated but was
quickly poked out, when running along
a rail fence surrounded by small growth it
hid in some leaves & stones where it was
taken alive.

Part stripped
from cedar trees

The cedar trees all about were stripped of
their bark, the nests in the vicinity being largely
comprised of cedar bark. Some of the nests were
found in the bark of the trees.

from leaves
in the chestnut

I noticed that when ever a chestnut
tree had been cut down this past summer
and a few young shoots had grown out,
that these were perfectly green, though
every leaf in the forest has fallen
off or turned brown. The trees this
show how a concentrated flow of sap
can strengthen the life of a leaf, & that
being so strengthened, how it can stand
the cold of winter.

I also discovered two small chestnut
saplings that had completely grown together,
& as they had been destroyed by fire,
I cut them off & brought them home.

Dec.

Friday November 27th. This morning the
water in the big iron pool, that is
for the chickens, was slightly frozen. This
is the first occasion this winter that
I have seen any ice in this iron pool,
though I noticed a week ago in
the little pools by the wayside.

Sunday November 27th. Last night was
exceedingly cold & this morning the frost
with the exception of the deepest ones
frozen over. Mr. Stewart called & said
that he was going near the Bull's Head.

to look at some chickens, & he thought I might go that way, so for my days variable, so he stopped in. The morning was all that could be desired, it was cold but there was no wind, & to me walking it did not in the least chilly.

The freezing
of ponds.

We rolled over a line over the ~~free~~ surface of the ice bank that comes to the edge of the Turnpike road, & the ice was so thick that though I threw a ~~great~~ stone high in the air yet it only brought a little water when it struck the ice & did not go through as I had expected. Silver Lake, being a much deeper pond, than the one referred to, had only a slight border of ice.

One more.

Near the Little Clon road there is a mouse's nest that I have looked at for the past three winters (counting this as one), on the two first it was in the same nest (see March 8th 1885) but today I discovered that it had moved to one near by, in the same little clump of bushes or briars, which is not over six or eight ft. in diameter.

In the same locality where we captured the mice on Thursday we had a mouse

a number today and it was very
amusing to see them run along the
branches to a place of safety. They
seem to have regular branches along
which the small scaper in their
wanderings abroad for today - discover-
ing a beautiful mouse mansion made
out of a cat-bird's nest, with a
nicely rounded top of cedar bark, two
individuals ran out & each took to
the same branches in running away.

Habits of
Hesperomys

This would not have been worthy of
remark if one mouse had gone directly
after the other but such was not the
case, there being a considerable interval
between the exit of one & that of the
other.

In the same woods where the mice were



so plentiful was a tree of
C. alba which bore very large
nuts - one of which I have roughly
figured. The size, however, is quite correct.

The large Hickory nut which we
found on Nov 1st 1885 was the
shape of the one I have sketched
No. 2, and was also the fruit
of a young tree.

Near the Hickory nut, I have shown the

Hickory nut

as being discovered today, I also
found a very large chestnut - by
far the largest one that I remember
having ever seen. The following is as
correct a drawing as I can make
of it.



We found the man Mr.
Storrs was looking for, in the Mackellar
place, he living in the gardener's house
about $\frac{1}{4}$ of a mile from the main house
which is now deserted. The house
is only surrounded by woods, a well-
orchard being in front of the door
& a few fields in various directions, but
the general aspect is woods, only two,
or perhaps three houses being visible from
his porch.

He told me that a ~~man~~ was
caught stealing one of his young
chickens this morning, but was frightened
off. Though I tried to draw him
out concerning the birds & beasts I
did not succeed to any great extent
as he wished to talk chickens.
However, he informed me that Storrs
gave him no trouble about the
place. His name was Mr. Johnson.

Winter leaves

Sunday December 6th. I notice as I walk through the woods how the leaves linger on the lower limbs of the trees, while the upper branches are bare & wintry. This is particularly the case with the oaks & beeches and is probably due to the protection offered to the lower portions of the trees by the surrounding woods. Yet it is not wholly due to this cause, for I noticed the same state of circumstances on the hill, where no protection was given, for the trees were too distant from one another & beside in the young trees the leaves are present though they may be as tall in some cases as the old ones. It is probably therefore, that the sap lingering for a greater time in the lower portions of the tree causes the leaves to remain in the places where they grow in summer days, though now set brown & withered, and gradually as winter gets a firmer hold on the trees & the sap mostly leaves the tree, these ghosts of former glory will shed their shroud with the north wind.

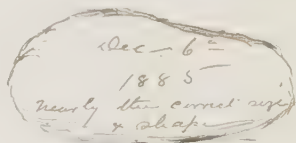
a cheewink

I saw a cheewink in a cedar tree; it was a ♂ & looked very odd.

1885-

Some curious
eggs

Yesterday & today a kind hen has laid me some curious eggs, the one of Saturday being long & thin & of a red corn color, while that of today is somewhat shorter. May the good creature produce several more of the same kind, as they are quite interesting. They had no yolk.



The Ground birds

Sunday December 13th. There is considerable of a storm raging at the present moment though it is a warm one, the wind being from the south. I have several times this evening wondered where the ^{are} ground birds that I watched this morning for so long a time. They were then in a little valley by a tangle of cat-briars & one of them after a time flew to the top of a cedar, the while calling a note different from their usual twitter. Soon he flew over the swamp, and it was very pleasing to see one after the other of the remaining birds follow this leader. I was behind a bush, & the birds did not see me, nor I them, until they had

1885

flame was a tangle of unusual height when it was - interesting to notice their sudden upward movement.

As yet it has not snowed - though there have been some very cold days.

On the prospect Dr. Merriam writes - has but a man made of a mild winter that mild winters follow good wet years, & that there have been alternate years in the Adirondacks. 1881 & 83 were good wet years, & the winters of 81-82 & 83-84 were mild ones; according to this we ought to have a good winter.

On the seasons Sunday, December 30th, 1884. The weather was very cold, but not so cold as last winter. The snow was very deep, and the ground was very hard. The trees were very bare, and the leaves were very dry. The ground was very hard, and the snow was very deep. The weather was very cold, but not so cold as last winter. The snow was very deep, and the ground was very hard. The trees were very bare, and the leaves were very dry. The ground was very hard, and the snow was very deep.

How different is a winter ramble in this respect; there may be snow or there may be none, but we have to look close indeed to note that a few ^{dead} ~~more~~ leaves have blown off of our oak on the hill side, or that the black-bird berries are a little more withered.

1885

One the season

than they were a month ago. When the
bur of "boreas" comes over the land - &
the leaves huddle together down in the
little ^{depressions} ~~valleys~~ in the " " as if they would
keep each other warm, if ~~any~~
be permitted to ~~remain~~ ^{remain} quiet long enough
that the snow flakes fall slowly down
and all nature is speckled - with it.
covering in a heap at one field - at one
hill side ^{it} is so similar to
a little heap ~~at~~ ^a month hence, ~~and~~
~~the character of what is seen~~, that one
is obliged to fall back on the calendar
for the want of any
change betokening the march of time
out of doors.

Today has been one of those cold
winter days that I have tried to de-
scribe, though Mr. Stevens & I found the
warm side of a fence, well protected by
the cedar trees & brambles from the wind
when we ate our lunch with warm
hands & happy faces. It does me real
good to see how Mr. Stevens enjoys the
hickory nuts that he finds, for he stops
by the way side and cracks one now &
then from the store in his pocket - & when
under the tree, the hammer of his stone

against the refractory Carya is a very often repeated sound.

Squirrels nests I visited the squirrels' nests that
and we found last - Thanksgiving day, & climbed
Squirrels' nests up & inspected three of them. In two
cedar trees only a few yards removed
from each other were two nests made
by flying squirrels. One of these nests
was entirely made of the foliage of the
cedar, little branches having been broken off
& woven together. It appeared to have been
but recently made & contained two
eaten hickory nuts. The other nest was
made of cedar bark in the usual way &
I think it was out of this one that we
frightened the two squirrels on the day mentioned.
The third nest that I climbed up to was
the one made, or at least inhabited by
the gray squirrel captured by Husband.
This nest was a very large one, made
entirely of cedar bark, the middle portion
being very fine so that the squirrel could
bore in it with ease. There was a
door or hole ^{facing} the South or South west,
& just over a large branch, so that
the occupant could use this as a sort
of door step. This nest was built in
a small pine

1885

December 25th, Christmas day. Up to this time there has been a portion of the Island shown when I have been, viz. about Old Place. I have often visited the country on the west side of Old Place creek, but on the side where the houses are, I had never been, so I thought today a good occasion to explore. Mr Sterns went with me, & though the day was cold, the wind being from the North East, we enjoyed the occasion. We visited the old mill & looked at the machinery all over the structure, & then we went to the cases with out success to see. This was the mill & was known by the name of the old mill. Cards reading Graham flour, Manufactured at the Mills 3. 9. " laid about the part eight or ten years ago. In the office we found a large stack of



1875-1877. The only birds we saw were a few crows, a flock of snow birds & a sparrow; and unknown

1885

Old place

December 25th, Christmas day. Up to this time there has been no portion of the Island shown when I have never been, viz. about Old Place. I have often visited the country on the west side of Old Place creek, but on the side where the houses are, I had never been so I thought today a good occasion to explore. Mr. Stevens went with me & though the day was cold, the wind being from the West-East, we enjoyed the occasion. We visited the old mill & looked at the machinery all over the structure, trying in some cases without success to make out its use. This was called the Summerville Mill & was operated by a man by the name of Carpenter. I found a ^{great number of} cards reading "Carpenter's 6 Lbs Graham flour, manufactured at the Summerville Mills S. I.", which cards have evidently laid about the structure for the past eight or ten years, for in the office we found numerous papers bearing date of year 1875 & 1877. The only birds we saw were a few crows, a flock of snow birds & a sparrow, and unknown

1885

The Mills
Station &c.

The following are the only mills I have
found on S. I.

Mill at Old Place, on the creek of the
name

Mill at a pond near Bull's Head, now
almost entirely fallen to ruin. Grandmother
tells me that her brother in law, Mr.
Crockeron, was employed there when a
young man. The vicinity is sometimes
called "Chelsea Heights".

Mill at Richmond, back of St. Paul
St. Andrews' Ch.

Mill at Richmond, on the ~~other side~~
Kill ^{below the} ~~from~~ one just mentioned, &
which Grandmother says was also
operated by a relation.

Mill near Egbertville on ^{Rockland} ~~Egbertville~~ And
now only a few timbers remaining.

Mill on Great Kill, near foot of
^{Johnston's or Tappan's} ~~Anderson's~~ Lane, also operated by a
relation long ago. [Lakes Mill]

Mill on pond, known as "Britton's Mill
Pond", sometimes used at
the present day.

Mill near Bradley's Road, recently
constructed & occasionally used.

Four of these are tide mills & the others
are at the outlet of ponds.

the one at Egbertville, Mr.
Aug. R. Grotz, the naturalist, used
to play when a boy & he has often
told me many pleasing stories
of his catfish-like hounds & the
green heron which he found in those
days about the structure. I
too, when there was a flood then
& on one occasion seeing a lame
boy with a crutch ~~in~~ bathing in it,
with his companions. This was about 1870.
A giant grape vine grows here, (I
am not sure but what it still does,
though I have not seen it in several years,
one so large that it was worthy
of note.

The days of mills have past on
Staten Is. for never again will any
grain be raised to keep one grinding.
The lofts have been saved &
the grain ground & the old beams
are now falling apart, for the
wheels in these old tide mills will
never turn again. Every Christmas sees the
moss grow thicker & every Christmas hears the
shrill whistle of the locomotive more often.

Natural History Notes re

1886 -

W^r J. Davis,
Tompkinsville,
Staten Island

115-427

1881-

A storm.

Sunday January 16th 1881 The morning of yesterday was one of the most stormy I have ever seen & it was difficult for the passengers to get on board of the boat, so high was the wind

The steamer Westfield, which left New York for Townshville under regular freight on Friday night with about sixty passengers had an exceedingly rough trip. The weather being very stormy, and a sea, but the lights on the pier could not be seen on account of the darkness, and the fog had come in so soon, so that the boat was forced to take the short run, and attempts were made to make her fast, but the lines would not hold and only a few of the passengers were able to reach the shore. Those that did had to jump from the boat to the pier. The passengers became greatly alarmed, but Captain Adams assured them that there was no danger and that they could remain comfortably on the boat until morning. An attempt was made to move the boat to the American Dock, but as she could not go there she was headed for Calfon. It was found impossible to make a landing at that place and the boat was finally brought back to New York. The captain provided tea for all on board with cake. The Westfield remained at New York until morning when she made another trip and landed her passengers safely at Calfon at 8 o'clock.

& the waves. When we had got a little way up the bay I noticed a shadow on the water in the stern of the boat & I do not know whether we had come from Staten Island or had come on board somewhere in the bay. I also noticed some birds flying against the wind up towards the city, & it was interesting to see what speed they made while the wind was blowing so hard.

This has been the only snow storm this winter up to date but it made up for all past neglect.

Sunday Jan 17th It was warmer today, though the snow laid quite deep on the ground and prompted a very extended ramble. There was a line yellow birds, and a number of others belonging to other species. A few Cecropia cocoons, and some winter birds completed the list of my finds

1886

I ate a number of ribes berries, which have greatly improved since the hard frosts, in fact. I do not remember having ever eaten better ones.

The song sparrow
sings.

Saturday Jan 30th. 7 A.M. I went out of doors just now to feed the chickens, & heard a song sparrow sing, the first of the year. This is quite early, and as it is very mild weather for winter, I am in hopes that all these tokens indicate an early spring.

Sunday Jan 31st. 1886. I went to New Drop station for the weather was fine & from there to the swamps in the interior of the Island. There was considerable snow last evening & of a moist character, & all day long it has hung on the trees producing a most beautiful effect.

He heard some time ago, upon the authority of a negro cook, that a great horn used to breed in one of the swamps on S. I., in numbers. Recently I was informed by Matthew Taylor, that a friend had told him a story to the same effect, & that afterward he had found the locality & an egg or two, & was interested, &

today I went to find the locality myself. When I had arrived near the place where I thought the ^{nest} ought to be, I inquired of some of the people in the neighboring houses concerning the birds, for I had heard that the



who were employed on the end R.R., used to eat their large numbers. I was directed to Mr. Dupuy, who did a great hunting, they said, & killed the native animals. I asked

nest of night heron

Staten Island Jan. 201

him to lead me to the snow off of me, I told him about myself & my desires, and he in turn gave me much interesting information. He said the birds built a little way back in the woods & that the Italians ~~did~~ ate a great many of their eggs at the time when they were employed on the R.R., & his boy also stated that some of the neighbors used to collect the eggs, ~~beat~~ beat them up & give them to the cows. Mr. Dupuy, who has lived in the vicinity all his life, says that the birds came to the spot only a few years ago & that they make a great noise on occasions. He thinks they have been about driven away by the bad treatment which they have received.

Night Heron

1886

He called them "quacks" & I see the names in Jordan's as "Squawk", Night-Horn. His wife informed me that they were particularly noisy in the mornings.

Yosemite

Mr. Loring also told me, upon inquiry, that he had often killed opossums on S. I. in years gone by, but that he hadn't seen any in recent times. Under a hay stack, he said, that David Simonsen removed this last winter, he found a dead coon, & he knew of several that had been killed in comparatively recent years. A fox was also seen ^{on S. I.} either this ~~to~~ last winter, I have forgotten which, by some men & dogs who were trying to start a rabbit.

Yosemite

A fox

I went out with two of his boys, who were remarkably quick in seeing squirrels tracks & in the snow, to look at the nests. They were indeed very plentiful, I counting seventeen with out moving from the spot where I stood. They were in oak trees and placed quite high up, & in some trees there were two or three nests.

Night-Horn

Gray squirrel

Flying squirrel

The boys showed me a nest in a cedar tree, out of which they had frightened gray squirrels on past occasions, so we looked it with a pole & this time two flying squirrels appeared. Mr. Loring

them for a while & then I threw several
~~snow~~ snow balls at them, hitting them three
times but without doing any damage
as that was not my intention to hurt the
poor little bears.

I met a young man on the R.R. embank-
ment as I was coming towards Bull's Head
- he going the same way -, who also gave
me some information. He said that one
of the Bulls had killed an opossum ^{some} 3.2.
or 10 years ago & that was the last one that
he had heard of. A man who had
killed a rabbit some few days ago,
upon dressing her, found an embryo, thus
showing that they mate quite early in the
season. The time for shooting rabbit is
today.

I saw three cardinal birds, and they were
indeed very beautiful as they jumped &
hopped about in the bushes ^{which were} all covered
with snow, their vivid color contrasting markedly
with the white.

A large hawk in a lonely orchard
was flying up & down a hedge row, and
a flock of robins & another of cedar
birds were observed on the Turnpike road.
Then there were a number of birds which

I don't know, but I think the ^{rather} large one near the
flock of cedar birds was the ~~hottest~~ ^{hottest} of the winter season. I often
saw it flying over the snow & the birds & the snow.

Opossum

Rabbit embryo

Cardinal bird

Hawk

Bluebird

124
Tuesday Feb 9th 1886. This is a fine morning and
the song sparrows are singing. As soon as they
can get breath after one song they start again.
Sunday February 14th. An overcoat was
almost too warm today, so bright was the
sun and so pleasant the weather. I
saw over the hills & in the swamps, some-
thing three deep in water & mud, for the
past weather has flooded the country
a large. The stink-cabbage is up. The
first Peepers (Hyla bicolor) were heard, the
Blue birds are abroad in numbers, and
the willows, that are about the pond,
were a beautiful green; all charming
the season

Young chestnuts in the Spring is some-
thing new to me that is to get them in
the autumn & yet today I found my pocket
full.

Cow eats Rhus
I observed a cow eat the berries of the
Sumach (Rhus glabra), & the boy that was
with them said that the cow did so.
This same boy has a very nice dog with him
& when I first put my arms round his
neck & looked into his eyes he growled.
I let him go, said he needn't be a
cross beast & walked away. Soon, however

he came up to me looked up in my face & licked my hand, so we were friends, & both were so sure that we had not been otherwise.

Some time in my back notes, I have spoken of the crows being in great numbers in certain little valleys, near the highest point, & also making a great noise on the occasion. I stayed in the same place for a long time, & finally in the afternoon went to hunt them up. I found them in the same little valley, so I think it reasonable to suppose that it is their favorite place for a meeting.

I again visited the mouse's nest near the Little Clove road (spoken of on Nov. 29-1885); it contained two individuals. I approached it very carefully & poked it with my finger, but only enough to cause a small head to appear & finally the whole body. The nest is near a cedar stump about 5 ft high, & the whole is in a tangle of cat-brier. Hesperomys got upon this stump & looked at me over its top, & as I stood in a hollow it was considerably above my head, for all the world looking like a very earnest divine reaching me.

remains against beating new beings into the
nests belonging to innocent mice. However, as
it saved the disease by making it clear
I could not believe it was enter by in earnest.
I tried to give it a piece of bread but
it ran away & went into a hole ^{at the base of the stump} which I
afterward found led to a large one -
I touched the nest about a yard away.

I touched the nest again and out came
the second mouse, which took the above-
ground route to the tunnel. I think,
I left the piece of bread on top of the
central stump, & took the ^{route} over ground, ^{my}
self, in search of fresh adventures.

A mouse ran or better jumped in a
small pond with a great splash as I
approached.

A pupa, or maybe it was the larva,
of Chimaracephala viridigasciata was observed
on a warm hill side.

It is very interesting to see what a
few scattered bushes, that one can
scarcely see through so low as these
bushes in number, will do towards
protecting the snow that has fallen
among them. I think the hint a valuable
one.

1886

Sunday Feb. 21st. Nature is not made
 disagreeable. Frosty since last Sunday.
 Today there is no snow, but the
 air is quite winter like and is certainly
 very cold. I went out to the mill
 Arthur Hollick to show him the Heronry
 that I visited some weeks ago. He was
 unable to discover anything further
 than what I have already recorded in
 the last W.P.C. proceeding. The nests,
 then stated, were built in oaks (swamp
 oaks), and we observed one in a white
 oak & another in a Black oak.

Heronry.

In the same spot where I observed the
 Cardinal birds on Jan 31st 1886, I saw
 them again today. I have noticed
 several specimens that they have
 been for a long time. I have
 been in the water in mid winter &
 have seen one of these birds there
 the winter nearly spring. I think, from
 what I have observed, that in summer
 they spread over the country more, for at
 that season I have found their nests
 or seen the birds which I have
 noticed them during the colder months.

I saw many ground
 about some ancient locust trees and

we visited several. The ground had well
been broken by the flying squirrels, & I noticed
in short order, a great deal of interest in
the way of removing a broken nut. The
majority of the trees the squirrels were seen
in the same place, the nuts eaten off,
while those about another were chipped
inward into from the side. Near
a third locust tree I found a great
number of nuts eaten by mice, and
among them a number of shells of the
little Carya amara. In an old orchard
near Richmond the hollow trees retained
many numbers of mice eaten hickory
nuts. In a field we found - upon
the ground the shells of nuts to make
up, the shells and shells lying in a
little row near the mouth of a stream.

From the old farm near Richmond Hill
I looked up on the hills, white mountains
in the distance, & upon mountains, others, from
the same point. The large sandstone ^{mountain} ~~mountain~~
looked like one & I looked up on higher
peaks of the same. This is a new mountain.

We visited two ancient burying grounds
one on a high hill near Richmond &
the other near the Hermitage.

Old burying grounds. Take down one of the inscriptions or verses which the stones bear in the firm of these grounds.

See page 51)

For my hand were so cold, but the stones were erected to the memory of either a Bedel or a Decker. In the ground near the Hermon, which is an ancient orchard now grown up with forest trees, & which commands a charming view of the great salt meadows being near the border, there is a stone erected to the memory of James S. Hecker, who died July 29th 1839 aged 78 years 6 m. & 7 d. This verse is also on the stone.

Here lies man to rise.

With visions and woe
And fitted for the skies.

Old house & spinning wheel

A little boy

He ate lunch in an old house filled with mud near the burying ground on the edge of the salt meadow, & used a broken old spinning wheel (with wheel gone) for a seat.

Little boy in New Dorp station telling about another little boy, who had been in the same institution with him. "He woke up in the morning & found his mother & father dead & he was frightened for he had not known anything about death. So a policeman brought him here."

Empressville Staten Is.

January 8th 1886

Mr Lawrence Brainer,

Dear Sir,

In response to your card
I have packed up the few specimens & send
them with this letter. I have not put
them in saws for I do not care to man-
age them as you have and
examine them carefully in the fall when
I could not do so well if they were not, in
side by side. When in papers they seem to
be somewhat separated from the general stock
and you cannot handle them in so well,
it is a very good plan for the common
species, but not a good way to fix the
specimens I wish to send to you. It has
first struck me that you may have forgot-
ten that you advised me to put them in
papers, which advice has been the cause of
my writing so much about it.

While on Coney Island in 1884 I captured
a number of a large species of Conocypalus
— you thought it might be capitatus — &
though I went to the portions of our
Island that closely resembled Coney in their
make up, yet I was unable to find the
insect. This year I was on the island

(the western end of S. I.) when I thought I heard a familiar stridulation in distance. I went quickly to the spot & then sure enough was the same insect that I had captured on Coney Island. I noticed then also, how exact the natural features of this little scrap of shore corresponded to the place on Coney I. when I had captured the insect described.

The same thick grass was there, (it being about at the other places visited on S. I.) & this probably had more, than any thing else, to do with the fact of the grasshopper being present.

You probably have noticed similar facts, but I thought it would do no harm to write down mine. The only place where I have been able to discover another species of Cnocephalus, is in a tract of swampy "land" bordering a salt meadow - in fact the piece I speak of is probably often overflown by the waves, in the spring tides particularly.

Can you get your specimens of Cnocephalus named yet? for you remember you said you were going to make an effort to get them identified.

I enclose three cickets, but I think

the one of the same species. I read in
the Standard Nat. Hist. of that - Gryllus luteicornis
G. abbreviatus G. anglicus & G. nigra are
in the middle states & vicinity. Though I
have tried to find sharp differences
& abroad yet I have not been able to find the
varieties represented by those sent. Perhaps you can
tell me something of their habits or the places
when I would be likely to find them as
you did with Paroxysma flavidana^x, which
I found this summer in numbers.

(+ P. atlantica)
usually introduced
by the 12

P. vulgare

The Xiphidarium which I captured at Louis' River
N.Y. is very different from any thing I have found
about home, and makes a very loud noise when
stridulating. You will notice its red face
or front. They live in the cranberry bogs & I
remember how wet I got - catching the beasts.
They crawl upon the higher grass stems and
quickly get to the opposite side when they see
you coming, & in all seem much more
shy than those I have before noticed. Some
of this may be due, however, to the exposed
situations which they so often occupy, as I have
described above.

No. 8. I thought might be a var. of B. aequalis,
but the claws are yellow on the hind legs.

No 10, was captured somewhere in N.Y. by
a friend. It was taken at sugar with

specimens of *Acrida* & *Acrida* to be different
species from those I have sent you before.
Noting the very long spines on the tibiae of hind legs

You remember I sent you, some time ago,
two specimens of *Acrida* *viridis*, the common
& slender form as you named them. I
imagined they might be different as regards
species, & this past summer I spent some time in
trying to find this out to my own satisfaction.
There is no doubt that we can be distinguished
from the other in their stridulation. The of
slender var. is something like the running down of a
very small clock when the regulator is removed, while
the common form makes a pulsating noise. & then again
the slender var. is usually found on the lowest plants,
though this fact perhaps is of no very great value. I have thought
that as the stridulation was so different, it would
imply a structural variation.

If you are well, now, now they are the same, (you have
the opinion I sent) do kindly tell me all about it, if not
too much trouble. I know they have been tried.

but the var. may not have come into view on that occasion.

The only insects that I would like to get back
again are nos. 1, 3, 4, & 5. I have the crickets, if
you can make more than 4. abbreviates out of
them. If you think of any particular insects that
you want from the East, and that you
think I might obtain, I will be happy to make a
search for the same, if you care to have me
do so.

Hoping I have not completely tired you out
with this very long letter, I remain

Yours very truly,

W. F. Davis.

March 5th 1896

1806

Washington Birthday. Today is quite warm & pleasant. I wandered alone in the woods to the highest point of S. I, ate a few apples that tasted like cider, after their winter freeze, and were very good. There was also a few chestnuts on the ground & I found one that had started to grow - had a green sprout.

Apples

On *fungus growths*

I have noticed on several occasions and particularly today, how some of the fungus growths grow parallel to the growth. No matter how the tree or branch inclines they grow in a horizontal position. A leaf is now and then turned, and a tree will grow out from a trunk with considerable incline, so much so that I have known them to fall and yet some kind of fungus growths seem to very rarely to depart from the well described above, that I think, taking their size into consideration, that it is ^{interesting} some kind of "Sci.", & she took possession of the one in which he was introduced into the cage. As the male did not leave his box during the daytime although it was full of nuts, there was but very little chance for her to regain the box in his possession.

181

1886 || of some kind.

Lithopane.

On the Turnpike I discovered Lithopane
unimoda, in a small depression caused
by a wagon wheel, this being the earliest
date that I have ever found it. The two
other specimens the
Mch 19th & Apr 17th

old & high
wind

Sunday February 28. It has been very
cold lately with a strong north wind
blowing for about 26 hours. The steamers
were unable to go to sea for the tide
was so low that they could not get
out of the bay, and the boats on some
of the ferry lines were unable to get
in their slips. There is also much ice
in the bay.

cold.

I am housed today on account of a
very bad cold so bad indeed that I
can not breathe through my nose with the
exception of the times I take violent
exercise.

The introduction I borrowed a ♂ flying squirrel from between a ♂ & ♀ to introduce to my ♀. I set down flying squirrels to watch them this morning & an hour or half later either one came out of its tin can. I found the ♂ appeared & was very thirsty for he drank water from a large tin can with it though I ought to stop him but he got too much. However, I didn't stop him. After about the hour he found a nut which he gnawed open. After eating a large nut my "Sci." came out & it was very amusing to see the first meeting & the sudden start. The ♂ is now in "Sci."s can, she is eating something on the bottom of the cage & this act of thought has lasted so long nearly an hour that I am getting tired of watching.

Wednesday March 24. All day Sunday Monday & Tuesday the male squirrel occupied the cage belonging to my "Sci." & she took possession of the one in which he was introduced into the cage. As the male did not leave his box during the daytime although it was full of nuts, there was but very little chance for her to regain the box in his possession.

not in while he was there, for it
was evident that they were still there.
This ♀ is the one I got out of a nest
last May, before her eyes were open, &
it is no wonder that she should
not become acquainted easily, for she
never saw one of her kind before
or near.

A great change overtook this
feeling, of courtesies, each other's share
& intruders, last night, for this morning
all the cotton is removed from the
lower & smaller box, when "Sci." was,
& is taken up in the large box when
the male & she are now together.

So it does appear that with
squirrels, as with people, friendship
is of gradual growth; for now
perhaps they are happier, yet they
did not consider that they were
nearly enough acquainted before to
warrant their coming in such
close relationship. The more I see
& observe of squirrel life & ways, the
more respect I have for their mental
capacity; their nervousness I think
being one of the best proofs of their
intelligence.

Friday, March 5, The English sparrows have commenced
Eng. Sparrows. to build; I saw one picking up a feather today.

Sunday, March 7. An examination of some
tree stumps near Green Ridge, gave the following
results.

				Diameter of trunk
				34 1/2 in.
	Center nearest the northern side	- 82 rings		
Pine trees	" near middle	100 "		25 in.
White oaks	" " "	95 "		
Young rings	" " "	113 "		27 1/2 in.
	" " North west side	106 "		27 3/4 in.
	" " North "	95 "		28 1/2 in.
	" " Southern "	100 "		
	Out line on wagon	99 "		

Comparing the above will give about 3/10 inches for
each years growth or ring, or 3/10 inch added to
diameter.

In a sandy field I found an old brass
Indian button with a star on it - enclosed in a ring.
There were also a few dots in the center of
the star. Also a number of Indian
implements. There was a spring near by, and
this with the sandy soil, probably attracted
the Indians to the locality.

Night herons. The night herons built near Green
Ridge last year; a few of their nests
still remaining. They were built in swamp
oaks, and then had been forty- (about) nests
built one time and another.

137, 138

flying
squirrels

Two flying squirrels in a rotten tree and many of them in an old house. I think the female flying squirrel is the larger of the two.

Red winged
black birds.

A flock of birds - apparently red-winged black birds.

Carolina
bat.

March 11th I went out on the Turnpike this afternoon to find if possible the bats, that inhabit an old barn in numbers every summer. The old German, who has charge of the place was in the barn, so I got up to the loft & looked as thoroughly as I could, but could not see anything of them. I think it probable that they stay in the barn in winter, and they may be under a piece of flooring, where there is a space of about a foot, sufficient room for them to form one or two large clusters.

Mr Bassett tells me that in England his father pulled down an old porch, and in the open top, was found a large cluster of bats; he thinks there were probably fifty in all.

Xylocopa
virginica

Mich. 14 (Sunday) Mr Cliff Wheeler, some weeks ago, informed me that a man employed by him in chopping down a tree had discovered a ~~carpenter~~ bees nest, which contained some of the bees. This hint was kept out of doors to keep the bees from coming forth, & was last evening presented to the Natural Science Association. The specimen is before me now. It is in a dead willow, having five ⁱⁿ inches & contains six bees, 3 ♀ & 3 ♂. There is no trace of cell left, the tube being perfectly open, the bottom, however, sealed. There were at least seven cells, as is shown by the architecture of the tube.

Blue birds are extremely numerous now, I counted yesterday, a flock of twenty five, & it was the same on last evening how plentiful they were.

Now I am off for the country & into adventures.

8.40 P.M. I went to Tottenham and rummaged over some fields in which I had hoped to find a few implements, but I was unsuccessful. However, in one of the old fields that we have visited many times I found some fine specimens.

The most "interesting" was a little hammer-
arrow head which I found in the bottom
of a moist-firm ground; this was

a ~~small~~ in the time of the Indians. It
is very sharp and hurts when its point is
pressed against the finger.



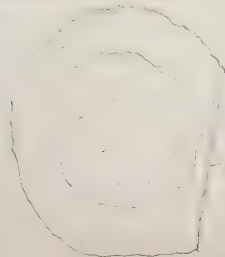
It has lost nothing of its
completeness since it left the
hands of its copper-colored master,
for the mossy ground, I think, was
never tilled before, & so the arrow head
was not exposed to the weather.

I have not drawn this specimen



correctly, but the original
is exceedingly faulty. It
is about $1\frac{1}{4}$ in. long
& about $1\frac{1}{2}$ in. thick,

being a natural ^{gray} pebble with a green
moss around it. I cannot tell what
it has been used for, but I have others
in the collection which though not so
complete, were I think meant for the
same use -



A large "hammer stone"?
with one side deeply scooped
out, & three ground faces
on other portions of the implement; the
largest one

at a. Nearly $4\frac{3}{4}$ in. long & about $2\frac{3}{4}$
in. high. Made of a ^{hard} red sandstone (iron stained).
Besides the above described specimens,
I have seen more or less interesting
implements found.

Red winged
Black

This red-winged black bird is here; I
saw a large flock today. In one
division I saw nothing but males, & I
did not get near enough the others to
determine the sex.

I have just found an Indian arrow head
- one that was used in hunting. As I sit
here eating my lunch, I have counted the
different strokes that appear on this
completed flint; strokes that were chipped
away piece after piece, & finally made these
delicate notches, so that it could be
tightly to the shaft. How much easier it
is to make an arrow head with out these
notches - an arrow head for war, than it
is to make one useful for the occupation
of peace. And as I sit here in this
pleasant strong sunshine, it also
seems to me harder to hold that happy
state of absolute kindness & good fellowship,
than it is to run on that inclined
plane which leads to disagreements &
trouble. True, we do not always

away that we are on this inclined
plane, & sometimes, also, we are led
there by another, or by accident. How
seldom indeed is a charming equipoise
of character attained, & also how seldom
the perfect hunting arrow.

Wednesday March 17th.

afternoon. The day has been so
warm & pleasant. The
great number of robins in a large
place on Ward St. & they make much
noise as they fly from tree to tree.
Along the Harbor wall when the sun
has been warm, there was a flock of Snow
birds & Song Sparrows & they seemed to enjoy
each other's company. There is also a
bird that calls "Cheew Cheew Cheew Cheew".

I have heard it often, but do not
remember to have ever seen it. I certainly
do not know what it is. ^{It is the} ~~bird that~~

The house above is out in view, &
the place is now being a noisy time
in a small way.

I cut off a stalk of an arbutus
tree which the drawing I have made
somewhat represents. There are four
others on the same tree & I noticed
a number of similar branches on other
trees in the vicinity. I have some of these
under observation & will put down my notes and facts
at some future time for I have many other things to do.

Birds

1886.

Sunday March 21st.

It rained this morning & has been foggy all day, however, this afternoon I went out. Annel worms are very numerous & almost any stone that I turned over, covered several, which quickly withdrew to their tunnels. I captured a few better under stones & also took a neuropterous insect or two flying about. These neuroptera I have often noticed in the vicinity of broods in early Spring, & believe them to belong to Fam. Hymenoptera. Last year I

discovered some crawling about on the snow. I turned over a few pieces of snow mounds and the grass was beautifully green beneath, and also some mosses & a lichen, ^{very highly tinted.} I also made a collection with a magnifying glass & I think I shall remember for a good while the benefits of one hour's little collecting with its brisk & continuous action.

A quantity of birds were abroad, the waterfowl making a great noise; red-winged black birds calling & now & then the sorrowful note of a hawk. I had an opera glass along, & I watched a number of birds, particularly crows. It was very interesting to sit across a valley & see the black fellows from their feathers on the opposite side, sitting, maybe, high up in a large tree, & never suspecting that any one was looking on. There was one crow that kept calling "Yow - Yow", instead of the

usual "caw - caw". On the way home
I observed a number of crows in a cluster, or
on adjoining trees, & turning my glass that way
I discovered a large hawk sitting quietly in a
bird tree. After I had watched them a while
the hawk flew over towards where I was standing
& a fine large fellow it was. The prevailing
color of the under side of the bird was a
buff, with some black markings on the wings.



On my rambles over one of the
hills near here, & where I usually
get under a barbed wire fence, (on
account of a depression in the land)
there has stood a large tree, in
which I have always been interested.
This interest arose from the fact
that this ^{main} branch (marked a) has
grown deeply into one of the two forks
of the trunk, as I have tried

to show in the rough sketch that I made out
in the hills. The tree is now marked
by the woodchoppers blow & will soon be cut
down, as many others now lie at full
length on the ground & the hill side
looks bare & cold.

1886

March 25th.

I went out this afternoon
as the days now are much milder. The
red-winged black bird is in full song and
I wait for a long time on a stump, listening
to ^{their} sad & plaintive song. I only saw males.

Chickadees

I found a goodly number of chickadees, and
might have picked up many more, as it
is evident that the squirrels & mice can find
all they want to take them until berry time
comes if there was not an abundance of hickory
nuts & acorns lying about.

Sparrows

Sparrows

I found a goodly number of sparrows, and
might have picked up many more, as it
is evident that the squirrels & mice can find
all they want to take them until berry time
comes if there was not an abundance of hickory
nuts & acorns lying about.

Lithophane

Lithophane

Lithophane unimoda, Latham.

The white maples have been out in blossom for
the last several days. It makes a vast
deal of dirt as to where they are
situated, in regard to the business of
their flowers. I know of several on
ones that are much more advanced
than the others in the same row.

Sunday March 28th, 1886. I went
to Anadale and then along
on the shore side of the track to
Court House Station. The weather is
mild now, and this spring is much
forward & a great improvement on last
year at this time.

There are several tide lands along
this part of the shore, and they have
for the most part very steep banks, along
which the arbutus grows. It was one
of these that I visited, and the only
one that I have never been to before; the
banks being very high right down to
the bay, and their sides covered
with a thick growth of timber. There
was a flock of ^{domestic} ducks swimming about
in the pond as I looked down upon
it, and a kingfisher came screaming
from somewhere on its upper border &
flew down towards the sea, this being the
first one of these birds that I have seen
this season. At the upper end of the
said stands an old house and an
old orchard, & the land slopes gradually
down to the river, forming one of the
most charming pictures of natural beauty
in which the works of man are blended.

Walnuts &
mice?

that I know anything of. Walnut trees
grow about the house, and I found
some ^{nuts} that had been eaten by mice. I
think, though it is hard to judge
from the nuts alone, as the shells are
so much thicker than those of the hickory
nuts that I have given to squirrels &
mice, that they may not treat them
the same when gnawing.

I looked in a great number of hollow
trees to see if I could find any ~~one~~
at home, but did not succeed.

Crows

Crows were very numerous, and as I
sat eating my lunch I counted a great
many flying over towards the shore. I do
not remember now the total of these
different counts, for it was done in six to
ten, as they came by in little flocks,
but fifty individuals must have passed.
And on the way home, from the car
window I saw a vast number in a field
in one great flock, so it would appear
that they haven't mated as yet. However,
on a branch of a tree in the distance
I saw two crows sitting close together in
a very low little way, and they looked
much interested in each other, as I watched
them through my opera glass. Over back

desires that their walls are, their
which are edged with sharp saw like
points & if they only had a sharp tail
they would be complete.

Deformed hickory
nuts.

In the "woods of Horden" were
remarkably deformed hickory nuts. (*C. tomentosa*).
I picked up one *live* specimen, and ended
by finding many, some with flattened
sides as they had grown together like
chestnuts in the same bur.

Holly

Just back of the little church at
Eltingville there grows a great deal of
holly, some of the trees being very large,
one about thirty ft. high & another
about 1 ft. in diameter. Near here, also,
I discovered the nest of a red shouldered
hawk, newly made.

Red shouldered
hawk

Cardinal birds

Two cardinal birds were observed, & a
pair of blue jays went screaming out of
a swamp, they certainly being very wild.

Blue jays

Cambourne
beauty

As yet I have not seen a Cambourne
beauty, though I have been on the look
out for one at every turn. They certainly
ought to be out now, as I have seen
them ^{or} many years before this date, when
the spring was no more forward than it
is this year.

Chipmunk

Gulls.

March 29. I should have stated yesterday that I saw the first chipmunk of the season. The gulls are also sailing about high up in the air, as they so often do in the spring; I saw many yesterday & also a few this morning from the steam boat.

Mouse, its companion

Tuesday March 30th. A massacre occurred in my mouse box either yesterday or Sunday night. There was a cracker & a number of American tuckery nuts, yet one mouse ate up its only companion & this morning I found the skin and a very few rib bones of the slaughtered rodent. The skull & most of the bones were gone.

showing how very fond of meat & animal matter these mice really are. Since I have removed its dead companion or at least its skin the little individual has been working about the cage & gnawing the cracker. I do not know that mice ever see ghosts, but if there be two cannibals of mine will shortly have nightly visitations. Perhaps, though the ^{deceased} was sick & would soon have died or may be he did wait for the last stretching out of the little ^{deceased} before commencing his cannibalistic feast.

March 31st. Two days of fog and rain & today the third. How ~~soon~~ do the three days of last week & Sunday, when the sun shone so warm, seem back in time & how unlikely does another day of warmth seem ~~now~~ when we look out of the window at the cold fog drifting along the house tops.

Thunder and lightning. Last night there occurred one of those thunder & lightning storms that are not uncommon in the spring, but which are always interesting, for they seem out of place. The whole sky was lit up with vivid flashes, but the storm itself was at a distance and the thunder was long in reaching itself heard - I could not see from my room window, the direction from which these flashes came, but from the reflections I think it must have been from the south.

Sunday April 4th. Though I sat in warm sunshine last Sunday with insects flying about, yet today the ground is covered with snow, true not very deep, but it looks strange when I think of a week ago.

Miss Frank says she saw a yellow butterfly on Friday, April 2nd.

Friday April 9. Spring of late has not made much progress, but today is so warm that it must mark a new line in the growth of the season. I notice this afternoon that the catkins on the willow I planted near the door, have opened a little, whereas for a week past they remained about in the same condition, so cold was the weather.

Sunday, April 11. To Ettingville with a companion.

Crows & their
nests

Crows have commenced to lay and I climbed up to several nests to see how they were getting on with their house hold matters. One nest contained one egg and another five, this last structure being exceedingly deep. Many shells of the soft-shell clam lay from these quarters to one mile back from the beach, which the crows had carried up from the shore to eat at their leisure on a stump or the top rail of a fence. These shells were often broken on the edges by the crows in their efforts to get them open.

Red shouldered
hawks

Red shouldered hawks line their

nests with pine twigs. As far as I can noticed crows line their nests with cedar bark.

Pewee -

Chewink.

Wood-creeper.

Pewees and Chewinks have arrived. A wood-creeper flew from under a clump of bushes in a suspicious manner but its nest if it had any could not be found. This is the first one of these birds that I have seen this year.

Red-shouldered
hawks.

In speaking of eggs it reminds me that the beautiful mottled eggs of the Red-shouldered hawk appear to have sometimes an extra coat of lime overlaying the brown markings, that is the ^{spots} seem to show through from beneath. This is true only of some of the eggs and gives them an interesting and beautiful appearance.

Red-shouldered hawks have a most plaintive cry - sounds sweetly and sad, and it is to be regretted that the note must be associated with a bird of rapine. Perhaps, indeed, ~~that~~ if heard from a very short distance ~~the~~ the note would not be so mild in tone as it appears when uttered as the birds circle high in the air.

Flying squirrels
& their young

Flying squirrels have commenced to breed, & today we found that one ran out of a dead sassafras when it was hammered from below. A friend ^(Hoy, myself) found several young a few days ago, so I have no doubt the individual in question had a family. I found a quantity of small seeds (~~dog~~ ^{or old} wood?) in an empty ~~some~~ nest which was ^{gnawed} ~~substant~~ by this animal. I suppose from the locality in which they were found.

Arbutus Lake

We visited 'Arbutus Lake', but alas most of the arbutus is gone - pulled up by city-bunnies to decorate Sunday schools with. They have on occasions come to D. I. with great baskets, fifteen or twenty strong, for the very same purpose I have spoken of above.

Indian relics

Many of the localities visited today seemed to be just the places that Indians might have chosen for their plantations & sites of permanent abode. But we only found two chips for all ~~the~~ looking, though it is true there were very good or true specimens of Indian work.

Tuesday June 14th. Some time ago I noted the fact of seeing an English sparrow pick up a feather, with which I supposed it was

young to line a nest, but it has not
English been until today that I have noticed
their nests in the ~~maple~~ maples in
front of the house. There are now no
birds in the trees. About 12 days
ago I noted several in some large
maples, but did not see them before.
However, they commence to build a little
earlier if they can find a bird house
or other place of shelter.

Thursday April 15th For the third evening
we have had a curious water-fog, so wet
indeed that when you stand under a
tree the great drops ^{of water} fall thick & fast.
These fogs come up the bay about 4.10
P. M. & do not travel very fast for
while ~~they were~~ ^{was at} the boat landing at
the time mentioned today, yet we
quickly left it behind as we rode
away on the north shore train. As I
walked home I met it again, it having
made some northward progress.

Willows These fogs have had a good influence
on the trees, and the willows cultivated
along the road sides are quite green;
the lilac bushes being also far advanced
toward leafing.

On the Willamette On March 17th I made a note concerning

On the ailanthus trees that grow along one side of the Harbor wall. I visited them again today & have also been looking at others along the road sides & in vacant lots. I have come to the conclusion that these fasciated growths are induced by the trees being burned about every spring & the flow of sap being retarded & the trees more or less injured. On one side of the wall, where there has been no fire, the trees are entirely normal, but on the other there are a great number of these fasciated stalks in all stages of development. ~~I have also thought from this that if the flow of sap was interrupted by cutting the trunk it would be the same as burning the trunk, perhaps the results would be the same, and I have been fortunate enough to discover a tree that had been cut about the trunk & whose top was fasciated as I had previously thought it would be under these conditions.~~ I have burned about several trees & cut a number of others to see the result, but from the above (I also noted today similar results in a distinct tree) there can be no doubt as to the effect of burning about the trunk ~~has on the top.~~ ^{After the flow of sap has been retarded it is possible a sudden stop of sap is fatal causing the fasciated stems}

101
Some time ago I found a Parus Antiope
butterfly in the wood-house, & today I discovered
a cabbage white butterfly marked between
the window sash & the shutter. They must
be abroad - in fact I hear of them, but
alas I see none as I go abroad myself
too late in the day.

Hesperomys
& its habits

April 16th. Since one Hesperomys ate
its companion I have tried to observe
if the remaining individual would beat
its foot against the cage - as I described
before this N.S.A. I find that it will,
but this would not tell particularly
against the theory that it was a mode
of communication, for a lone bird will
chirp & sing, a solitary dog growl, and
in fact all animals, man included, will
express their thoughts aloud even if
another individual of the species is not
near at the time.

409
1

Saturday April 17th. There was another fog
last night like those ~~one~~ I described,
but this evening has not brought its
expected one, so they may have come
to an end.

Sciuropterus

Flying squirrels feel seem to be
always cold, or at least my "Sci's"
feel are. When ever she runs over

my hands it feels like little drops of water falling on them.

Robins &
Sparrows.

Twice lately I have observed English sparrows and robins having a quarrel, and though the robins may be successful, I am afraid it is a great annoyance to them.

Fog

Chiffy

April 18. ¹⁸⁸⁶ Sunday. Though I did not observe any fog last night, it is here this morning, and nature has not got over her acute attack of dampness. However, the sun is out, and I heard the first chiffy sing, though they probably have been here a long time.

Butterflies

I went to New Dorp on the rail road walking out past Richmond and so on home. The day was charming and though I have seen hardly any butterflies this year before today, yet they are now abroad in numbers. Pieris rapae plentiful; Vanessa antiopa, five or six, and two Lycæna pseudargyrolus, the blue butterfly of Spring. They made the sun shine brighter, Cetonia irida hummed about some grassy patches, and Drasteria was not uncommon.

Cetonia
Drasteria

Spring
flowers.

About all of the spring flowers were
to be met with today. Stunner cabbage,
Calajunda, Day-look violets, Blood-root, Hepatica,
Anemone nemorosa and a little blue
violet were all found. I forgot
the flower of the hill-side - saxifrage.

The red maples and the pussy
willows are in full glory.

Blue birds

Three nests with eggs in them,
belonging to blue-birds were looked
at but not disturbed. Two night
herons were seen and field
larks were singing in almost
every clump of trees near the
clearings or fields. This larks
was also heard last Sunday.

Gray
squirrels

In a swamp, I discovered
a nest, probably one that had
been made by a crow, but
which now contained young
gray squirrels, nearly full
grown.

Tropidonotus in a drain in a field. I saw a water snake (*Tropidonotus sipedon*). It was high ground and the only water near was that bet the surface in the drain this snake evidently coming a long way through the underground water course.

Eutaenia *Eutaenia* *sauris* was seen in a peat bog where grows the cranberry, and *Bascanium* *Bascanium* *constictor* was found nicely coiled up for protection. This ^{on} my way home. This snake never tried to escape though I stepped within a yard or less of him, & I would have gone on if I had not happened to have seen the beast so nicely tucked away. I poked it with a small stick and after showing some fight it made off. It fell into good hands for it might have been killed.

I have just been out of doors, and the trees are dripping again from the fog that comes up the bay toward evening.

Good Friday, April 23-1886. Today
 was extremely warm, particularly in
 the sand at South Ambry, whither
 I went with a companion.

To judge how hot it really is it need
 only be said that I am sitting in
 my suit & shirt writing this account, the
 windows being open.

We had about an hour to wait at
 North Ambry for the train to take us
 across the bridge as they will not per-
 mit us to walk, so we strolled about
 the country. A few evidences of Indians
 were observed such as a bluff near
 the station I found two implements -
 a hammer stone and a celt.

At South Ambry we found Pyxidantora
 in full bloom and also a great deal of
Alnus. The cherry trees are out in
 blossom, & there are many insects flying
 about. I saw Thecla Augustus and
Larais archippus for the first time this
 year. There was also a Thaas
 but I did not get near enough to
 identify the species. I collected a
 number of beetles, particularly a pretty blue
 green Pezomachus on the pines, and found
 a cast pupa skin of the 7 year

Howard, it must have been last year.
I only note the fact - to show their
distribution in 1885.

At the bluff near Morgan's Station we
found many bones in the side of the
bank, about 6 in. from the surface, and
also some pottery and other evidences of an
Indian encampment or settlement. These bones
belonged to a deer, for I found a horn, and
both of us picked up a few teeth.
All the bones were split (a rib bone being
the only exception) for the purpose of getting
at the marrow.

Purple martin Looking up over the R. R. station I saw
a flock of purple martins, which I
suppose must build in the vicinity.
I have never seen these birds on S. I.

Chewinks There were a great many Chewinks, none
of them scratching the leaves & singing by
turns.

Fasciated Last Sunday I neglected to note that I found
a number of Sumach bushes growing in
a field where the ground had been
burned over, and much to my surprise
found many fasciated stalks. This is
connected with my recent observations
on the alantus, gives new

the subject, but I must again visit
the locality and examine the trees more
carefully. I have before me a
fascinated stalk of a sunnyside, but I was
unable as to its cause, and I could
not discover any marks of fire.

The weather

Saturday April 24th. It seems to have jumped
from cool spring into the hottest of
weather, and one can hardly realize that
it is yet an April day. Straw hats,
in the country places, have come into use.

As I scribble this in the office the
windows are all open & the thermometer
stands at 79, and it isn't like the
average thermometer either, several degrees
out of the way, but is quite correct.
In fact the little black one that hangs
up alongside of the large thermometer
says it is 81°, but I know its head
is a good one for truth in the days
of its youth and old age has not
cured it of its former vice.

Cherry blossoms

I notice today, a few white blossoms
on our cherry tree by the side of
the house, so South Ambury is not so far ahead

Sunday April 25th 1866. I went alone
to Potteryville. I was in hopes
that there would be a few fields plowed
& I wished to get them before they
were planted. It was also quite
threatening weather & I would be no
shelter at Potteryville & avoid a soaking,
so these two considerations settled the
direction was to take. It did not
rain though, & my umbrellas only served
to poke Indian implements out of the
pound, or other stones that I hoped
might prove to have been chipped by
the Indians on Blaine Is.

It is interesting to sit on the
crest of these ancient settlements &
though the Indians may have been
cruel yet we cannot look ~~not~~
at the broken pottery, at the arrow
heads and stone tools, with any other
feeling than that of sorrow. Give, give
freedom, & let me treat their handy
work with thoughtful regard.

I found another nearly round stone, about
the size of an average American walnut,
with a groove around it. This makes the
fourth one of this kind that I have
picked up & as yet I have discovered ^{or thought of} no

Indians

Supplements

164
found at once that they could be used.
Two thin scrapers (chisels maybe) and five
arrow heads completed the find, with the
exception of a small piece of pottery.

As the day was so cloudy, I did not
see many insects but a *Peltis* found
its way into my bottle and I observed
Chimera ocephala undifasciata fully developed
flying about.

Dandelions are out in bloom, and the head
is very showy. I stood and admired
for some time the giant bush
(it is really a tree) of this kind, with its
great forked trunk, and one mass of snow
white flowers. They grow large westward, but
this is the largest one I have ever seen.

I made a discovery. At or near Bull's Head
on the borders of a pond, three trees of
Betula nigra are to be seen, & I have
noted them before in these pages, but today
I discovered three other trees growing in
a swamp near Tottenham. These two
groups are the only ones that are known
on Staten Island.

The meadow lark sings very sweetly just
now, and the red black birds are very noisy,
but they have to make a sad song, though

The it
had a yellow patch on its side, and
before the ... &
feathers in the wing itself.

But the most interesting thing in ...
with birds, was the discovery of a sick crow
standing on the ... of a little ...
I sat down about one hundred feet away
& ate some bread which I had left, ...
the crow as I ate. It turned its head
from side to side, some times looking at
me, but it felt too sick to take any
interest in things not immediately dangerous.
I saw a piece of bread which I intended
to give it if too sick to fly, but when
I had approached quite near it flew
with painful slowness to a low limb.

7 1-2

I
... ..
the old birds flew off they gave the
she to something new
common crow, & that the bird ...
that I was looking for.

I
not in flower in the order ...

April 30th 1886. A few days past
was noticed that the blossoms were being
bitten or eaten off of the two cherry trees
in the garden. They lay on the
ground in numbers and those that
examined were torn about the center
of the young cherry, etc. A few, however,
were nearly bruised & there I examined
for a probable insect, but could
find none. I watched for the falling
blossoms but could not observe any &
as I suspected the destruction was
caused by the English sparrow I kept
a particular look out for their coming.
This morning I discovered two birds
in the tree biting the blossoms off and
eating the young cherries, and it was
a case of ~~the~~ ^{the} ~~birds~~ ^{birds} ~~how far~~
they ~~would~~ ^{would} ~~the~~ ^{the} ~~flowers~~ ^{flowers} ~~falling~~ ^{falling} ~~them~~ ^{them}
and ~~eat~~ ^{eat}. Many of these young cherries
stuck by the ~~cherry~~ ^{cherry} ~~would~~ ^{would} ~~have~~ ^{have}
fallen off of their own accord, as
quite a large proportion always do,
so that the real damage, though
considerable is not so great as
at first appears.

Since writing the above,

visited a number of cherry trees and only about those near houses for the most part, did I find any fallen blossoms. These trees are evidently often visited by the sparrows - than those out in the field and the ground as a consequence was strewn with the flowers. I ate a few of the young cherries and found them quite sweet & good.

May 2nd Sunday. I went - Tratchogue way & about 10 o'clock met Charles Long by appointment.

Thecla Augustus is abroad in numbers as is the "little blue butterfly," but I saw nothing of S. niphon which I particularly looked for. We captured a number 'of' beetles, & Charles, in a little rain water pond - about 10 ft. long caught many water beetles, some of which he was highly delighted with.

I took a species of Reschma on a sandy spot in the woods, and Cicindela venusta in copulation.

While I did not actually see them yet I heard two cat-birds, the first of the season. There were a great number of chickadees, and I saw several Hawks. As I was walking

Thecla.

Cicindela.

Cicindela.

Cat-birds.

Three chippies

was a road I saw, in a thick clump of bushes, three chippies, and as they were so still I remained quiet to watch them. One remained on a branch perfectly quiet while the other two nuzzled or hopped ^{now} & then from branch to branch, but never very far, talking, as birds talk, all the while. If any sceptic of birds talking powers had been about, and seen ^{& heard} this little party of three in the clump of bushes, I think they would have been convinced that they understood one another perfectly well, or at least ^{in this case} derived much enjoyment from their incoherent notes.

Sunday May 9th 1886. I went to Pottsville today.

It was a typical May day and violet, scarlet tanagers, brown thrushes and catbirds were abundant.

Chrysophanes
Colinus
Danaus

Chrysophanes americana, *Colinus philodice*, *Danaus archippus* were seen, the two first for the first time this season. A number of grasshoppers were abroad and a few lizards.

Edipoda corallina

Cistudo

One specimen of *Edipoda corallina* was observed. Male specimen of *Cistudo clausa* found, eyes scarlet.

Sceloporus

A dead mole (*Sceloporus aquaticus*) was picked.

Eyes of mole up & I made a search for it's eyes, and after putting off all this fuss, I found them. They did not come through the skin & only appeared as two small black specks, so they can not be of much use. We found a number of ^{mineral} implements.

I was fortunate enough to pick up a fine chisel.

Robins & song sparrows have laid their eggs. Again, however, the locomotive broke down, and we had to wait a long time until another one came up from St. George.

Tuesday May 21. The past several days have been cold and rainy, and this morning (also cloudy & cold) there are great numbers of recently arrived birds. Warblers, indigo birds and a great number of robins.

Thursday May 23. A robin built a nest in one of the pear trees in the garden which I did not discover until it was completed. It is just as I have seen about her but from the ground, and as it rains fast now, I can see the smaller birds with her head down, or protecting her eggs as well as they can from the weather. She does not seem to me to be very anxious about her eggs.

1886

Incubating Rite

& every now & then shifts her position a little but keeps her back pretty well opposed to the storm.

While I was writing the above she left the nest and was gone nine minutes (timed), the rain pelting down all the time on the exposed eggs.

Sunday May 16. I went alone to Watchogue walking out to the Turnpike & so on home.

This was a charming day after the fastness of cold & rain, and though there were but few insects out (I suppose owing to the long continued rains), the great number of new arrived birds & the general joy of the otter, well made up for the scarcity of insects. However, I saw a Grus or two, L. conjugata & a butterfly which I took to be P. atalanta, but I only saw it fly by. The chief capture in the insect-line was a Thecla ^{from my box} ~~which I caught~~ but it looks differently from those I took on an April day several years ago, & which are now over at the N.S.A., so that I have never got them at hand.

Though there may be many thousands
birds in some hats at the present
moment, yet I am glad to think
of the many thousand voices I heard,
as I might have heard, if I had paid
attention to them all as I

Golden crowned
thrushes, with their "turkey, turkey, turkey"
song, redstarts, indigo birds, a curious
sparrow like bird that said "chack"
five times in rapid succession, giving it
a slight bell like sound, three different
kinds of water birds on Old Place creek
& the brown thrush with its charming
song were a few that
attracted my attention. Last year
I did not see one indigo bird, yet
I have seen several so far this, though
not in great numbers.

While I was eating lunch
a brown thrush
came hopping up to where I was sitting
getting very near without discovering me.
I was much amused to see it scratch
itself so violently and then take a turn
at the beans, but after it had worked
a little while it looked up, and seeing
me, flew off with evident surprise, as
to how we became so acquainted.

Wild geranium
Lupine
Moccasin flower
The great number of flowers
as recently in bloom. The wild geranium
lupine, and the beautiful moccasin
flower (red).

The moccasin flower varies greatly
in color, some that I examined being pink,
while others were almost a red.

Reuther growth I found another hickory nest tree bearing
hickory nests deformed nests like those from the tree
growing in the "woods of red", found this
thing. I think that this peculiarity
in the nests may be caused by the
trees having been burned about
past time, & their whole constitution
it was injured - an injury which
they have never recovered from. It has
also been found in some places fasciated stalks of
wild yam & sunflower, & it may be
that it has caused the hickory nests
to grow in the peculiar manner seen.

Diphtheria fallax was found on a dead leaf.
I should have mentioned that
when I went to Pottsville last time,
I saw a very large knif-boulder,
and as there are no large stones
near there, this one is quite interesting
& must be measured. It is of trap.

I also discovered a new plant for S. L., a white flower
common.

1886

Monday May 17. Towards evening I went out in the woods & stood until long after dark against a tree, on the border of the swamp near Silver Lake. Three night hawks were flying over head, one calling its note continually, while the other two remained silent. The noisy one, made a sound similar to that produced by a sky-rock, so sudden was it, that I was fairly startled.

Crickets
road.

A great many crickets are "singing," & so is the road.

Small birds
& night.

The small birds generally, are very different from chickens in point of going to sleep, for they stay up ^{and active} as long as they can, and long after sun down they may be heard calling their particular notes, usually the shortest ones they possess. I heard a cat-bird when it was quite dark, calling its cat-like note in the swamp, and a brown-thrush had a great deal to say at an hour when it should have been fast asleep.

Thursday May 20. I spent an hour or two rambling about in the woods last evening. I could not but

observe as the bats flew by, how much
of the flight of bats. Large Batyroidae their wings moving
so much like theirs, that I have
often been uncertain as to whether the beast was a mammal
or an insect.

Black. The little flowers of the "black" pointed
towards the West, & I must examine
them some morning to see if they
follow the sun.

Field burning singing at night. Long after dark a field burning sang
its song, and it came floating across
the meadow a note of sunshine associated
with the black hours of night. How joyful
this bird must have been, if his song
did indeed indicate happiness.

Friday May 21st. I spent an hour or more
in the Harbor woods this afternoon, but did
not see anything particularly interesting.
I met my old Indian friend and we
had a talk about dogwoods. A night
hawk was flying about 5 P.M.; rather early
I think, as the sun was shining brightly.
I captured a few beetles, and after
returning home received a very interesting
string from an ichneumon, that I caught
in a handkerchief, & was going to put out of the
windows.

May 21st The young gray squirrels that I got on April 18th have proved quite interesting pets. When first captured one was very cross, and when approached jumped against the bars of the cage with evident anger. However, when he was in this mood, I gave him a cracked hickory nut, and he gradually learned to be friendly. I am not sure that his real intention was to bite, for on occasions when the squirrels were out on the table, and they fell on the floor, as they often did, I used to pick the cross individual up by the back, and though he struggled, he never tried to bite. The other Sciurus has always been of a mild temper.

Some account
of two captive
gray squirrels

They are now so tame that I can play with them like I could with a dog, and they seem always anxious to be near me, and only too glad if I will take them on my lap, or permit me, who has a fondness for such sport, to crawl up my sleeve. After he gets up to about my elbow he turns about and sits looking out at the wide, wide world.

17
from the same source.
They were when first captured
unable to grow their tails, so I
cracked them, not only cracked
them so they had a starting point
to grow from, and now they have
to grow the whole tail, and I
can see no particular difference
in their tails and that of the
flying squirrels.

Their mouths are situated so
far back in their heads that the inter-
cap must have a very wide top
or they will upset it in their
efforts to keep the water from getting
into their noses, and when it does
get there it is very comical to
see them sneeze it out.

They have a number of notes
many of which are subject to
great variation & I suppose have
an equal number of separate meanings.
It is certain that when they fall off
of the table onto the floor, that the
quick short chatter, during which
the whole body and particularly
the tail is vibrated, indicates some
mental agitation. On one occasion

when I placed one lead close down
to the table and in front of the cage
door, so that they could not get in,
one started his body, & he chattered
as described, while the other stamped his
foot rapidly, like *Thesperomys*.

Making up newspapers & carrying the
pieces into the nest, is a favorite
occupation. Some times they fight
for parts, eaten nuts & in a little
while they are both tucked away
snugly together fast asleep.

One poor fellow had a fit - or
ailment of the kind, a day or so
ago & for found it on its back
struggling violently.

Sunday May 2nd

I went to see the Night Herons
today, but only saw a few of
the birds and found so many
occupied. Some had climbed
up most of the trees and disturbed
the birds.

In an old house I found a
young ^{Grass} cat, which flew down from
the roof & was seen with the insect
net and captured the insect. After
I had examined it, I saw

go & it flew about among the
trees for a long time before it flew
to the house.

Hyla *terrestris* ^{♂ & ♀}, *H. cinerea* *tharos*, *E. cinerea*
tharos *luteus* and *luteus* *aluticus* were seen.
E. cinerea *luteus* the mosquitoes are very thick now.
luteus *aluticus*
mosquitoes

May apples are quite large & I brought
a number home to raise the larva, if
possible which each contains, if possible.

I found quite a number of plants
among other a variegated one that I found
with the same pattern as found.

I have now seen three species of
luteus *aluticus* the young, but
all of them have been found.

Indigo bird Indigo birds were seen; they are
very plentiful this year.

Hesperomys In an old bird's nest, with only a few
straws for a cover, sat a mouse, and as

I went by it poked its head out to
look about. It was small and ^{as yet} unacquainted
with the ways of the world and did not
know quite what it ought to do when being
stared at. After looking & sniffing the
breeze for some time it concluded I was

extremely dangerous, so it climbed down a cat-
brier stem and was seen no more.
Friday, May 2nd. I went out towards evening
and sat on a rail fence, looking at the
sun go down and listening to the birds
singing in the swamp. As I sat looking
and listening, a cheewink ^{also} sat looking
and calling "cheewink" in a dog-wood
tree - "cheewink, cheewink, cheewink". And
soon a young chipmunk came
out; one that had had but very little
experience and evidently, being lately
introduced into rural society. It
made several bounds, flicked its tail
in a superior fashion for so young a
beast, and was then going straight
on - but it didn't. That cheewink
out of the dog-wood tree had a nest
somewhere there which it didn't want
little "chippy" to find, so it boldly
chased him around & out of
those particular bushes, & then sat
quietly on its egg. He ran across the
road & off to quite a distance, but
after it went home I looked for
the cheewink's nest and found the
dear bird in a wonderfully exposed
position under a wild indigo plant

Chipmunk &
cheewink

172
I gathered a lot of dead branches
& moved a large stone, placing
both branches & the stone so as to protect
the nest from the chance passer-
by. And now we will look from time
to time, & see if the ^{eggs} get on in the
world in the way that eggs should go.

Orange N. J.

May 30 - 1886. I went to
East-Orange yesterday afternoon to
visit Mr. Hartman, who moved from
Hoboken N. J. in the first of the
month. He walked out to Ellwell's
Park and wandered about among the
charming wood roads. On one of these
roads I met some people whom I
saw in Hoboken last September, &
asked it in fact for me to go
anywhere now without seeing some
of the people, as I did
at Orange.

do.

The Rhododendrons are in full bloom
all through Ellwell's Park. They
have planted them in appropriate
situations. On a small bush I
discovered a honey moth & after
looking for a time I found the cocoon.
This morning (Sunday) we started

do.

In the vicinity of Eagle rock,
& the rock itself if we happened
to be near it.

Common Locust The common locust. is in full flower
& it can be scented from a long
way off. I think its fragrance is
particularly pleasing, for it is both
pleasant at a distance & near at
hand. which charm is not possessed
by many of the flowers with a powerful
Columbine odor. The columbine, (*Aquilegia*) is in
flower, and is one of the plants that
we never have found on State St.

I notice too that there are a few
sweet gum trees growing about particularly
by near the mountains, but they
are not very plentiful.

A number of dragon flies were abroad,
Ponomea carolina (*Ponomea carolina*), and I saw *Papilio*
astorinus, *P. troilus* & *P. lewini*.

P. troilus
We got up Eagle rock
on our way home & it well
rewarded us. Looking out toward the
North east, & also toward Nevada,
as far as we could see up &
down the valley, the country bore
a view that I had hardly expected.
Thousands of well loaded horses could

be seen & no general locality -
could be discovered where the
common class of dwellings
They did not appear to be a
day, but it without its more or
less pleasing house.

I came home on the Watling
R.R. through Silver Lake in
Decorated May 31. The Brooklyn
Entomological Club came to S. I.
today & I went out with them.
I captured a number of insects, but
it was cloudy & prevented many
butterflies from flying. It also rained
a little in the morning. However I

N. eurytoma
P. linnæus
Pamphila zabal
observed many of the *Eurytoma* *P.*
linnaeus & *Pamphila zabal*.
I left the rest of the party
at Britton's mill pond and
then went home & remembered
Hollow Sedge that I found one
day last winter, & I was thinking
how good it was to place such a
one in hollow tree in water, if not
in it all summer, as has been
done but experienced. However I
looked and found
a canted tree, with a few eggs

would be a good day from
last Tuesday if I had thought it well
have put their new hairs on their little
bodies.

In the barn the bats were making
quite a racket, with their numerous
squeals though I could see none.
The floor in places was covered with tiny
and one of these places I could
see a dead mass, which I thought were
the bats. Then old man gave me
a ladder & a pole, & I climbed up,
& soon enough there were the bats in
a cluster as large as my head. When
this was touched they flew in all
directions, some of them getting in behind
the window frame for safety. I then
discovered that there were numbers hidden
away in such places, & if I poked
about a little there was considerable
talking back. I captured one from
behind the window frame & on getting
down I found another on the floor.
The latter had two young & how tight
they did hang fast though with the
jumping about of the mother on
my efforts to separate her. However
when I found she had young

her go & she crawled away in a
cave; but the other I put
in the cyanide bottle.

~~I do not think there is any chance
but what this is the little one called
(*Myiophobus subellipticus*), which I have seen
the house, the ground, and
the house, the ground, and~~

After I got the ^{dead} bat home I saw she
was about to become a mother, so I
cut her open, & found two embryos
whose wings expanded 4 in.

In the same house where the bats were,
I found a scarlet tanager, which had
killed itself by flying against the window
pane, in its efforts to get out.

One of the prettiest nests that I have
seen this year was a song sparrow's
which I found this afternoon, on the
bank of a brook. It seemed to
almost overhang the water and the
bird could sit on her three eggs &
see the brook flowing by.

The iris and wild honey suckle
are in full bloom just now, &
I know a spot where there are great
numbers of honey suckle trees growing all
over the trees, which are mostly small,

and coming up to their topmost
branches. The corner or deep recess
of the floor gives a chance to such
a spot.

Sunday June 6. How strange it is that
wasps will build in localities where there
is insufficient room for the proper or future
development of their nests. Today I found
a little nest under a flat piece of iron
lying on the ground, and last summer
I made a note of a nest in
the air which had been built but
near the ground.

Sand turtles. A ♀ sand turtle found, had dark gray
eyes. I notice where new shell forms
over the old that the light-colored
are not always present but more common
in the old shell.

Butterflies and Pteris Antares. P. leonurus, Colias philodice,
Danaus archippus, Argynnis nymphe? Phyciodes
tharos, Vanessa antiopa, Lycena corydon,
Ancylorhiza munitrix and Pamphila fabular
were observed.

Eating lunch I am eating lunch up in an apple
tree out of the way of the mosquitoes,
and a cool wind blowing up from the

at home, but no
mosses have been seen.

A red-
winged black bird is very much worried
for she has a nest in a stump of bushes
not far off & she cries plaintively in
the apple tree & once hit me on a
branch just over my head, but flew
off with a brightened scream.
To see the manner was.

Linnaea June 10 - 1846. *Linnaea vulgaris* is
flying; I saw the first one of the
season.

The last robin left the nest in this
tree this morning.

"Fire flies" have been abroad about a week
now, but are not plentiful I have only
seen three or four.

English Hawthorn Last Sunday at New Dorp, I measured
some English Hawthorn trees, the largest
of which was $3\frac{1}{2}$ ft. in circumference.
They form a short hedge, & must have
been planted long ago, as they grow
very slowly.

Friday June 11 - 1846. I went to see

Chimneys

to see how many nests of chimneys were getting on. They are evidently some four or five days old & appear to be in good condition. The old bird makes but one visit for about - my visiting them, no more than if there were so many ^{hundred of birds} eggs in the nest.

Screech owl

The screech owl that I met some weeks ago was hunting tonight in nearly the same place & we remained our acquaintance. The night hawk still fly over in the woods so I suppose they may not be the best thing to be seen for the eggs.

Sunday June 18th. I picked stones all this morning, for it looked like an all day rain but the sun came out at noon so I went out too.

Chimneys

The chimneys have grown a great deal since Friday, & when I went to the nest they opened their mouths, the sides of which are now red. The keep now still & do not squeak like many little birds, for if they did the world soon be discovered and eaten up by the prowling beasts.

Bellula quadrifida

Bellula quadrifida abroad.

Chimneys

Saturday June 29th. The chimneys have gone from the nest, probably several days ago. Darius archipicus abroad in

Darius

1886

some numbers.

Crested tit - Since I discovered the nest of the
4 great crested tit in the hollow cedar on May
flycatcher 31st, a great crested flycatcher has had
possession but some one destroyed the
eggs, for I found one lying on
on the ground.

Bugs.

Sunday June 20th. I spent today alone
in 2nd valley. Under a thin
stone. So hot that I
but itself away for the day. I must
have been a hot place, the stone
being so thin & so by itself.
another one; but then Bugs
must heat very much, for I find
them collecting insects at mid-day.
I found one so engaged Sunday
last & also one today.

Nemobius

Nemobius vittata is about as long

flies

The butterflies observed were: Papilio astion
P. troilus, P. turnus, Pieris rapae, Danais
chrysippus, Gnophos sp., Vanessa, Antistha
Neonympha eurystis, Lycæna pseudargiolus,
Amycloxypa nemitor, Pamphila pectus,
Eudamius lycidas (laten), Eudamius pyllades
and Eudamius tityrus,
Chrysophanes americana seen to land on

Psyche.

This is the time to gather Psyche con-
federata baskets, for they have hung up
now previous to hatching.

Carpenter bee

I found the first case, that I be-
observed, of a carpenter bee entering or
coming into a beam from the side;
& I do not think it would have done
so on this occasion if the beam had
not been protected from the weather.

Dragon flies

I observed the following dragon flies and
also missed Mesochorus, which
flew out of reach much to my sorrow.
Platycorus, Platycorus, Platycorus
trimaclata, Libellula sumpatriata, L.
fulchella, L. quadrupla, Mesothemis longipen-
nis & Diplax elia. Perithemis dominica

Hylas

was observed a week ago but was not
observed today, though probably flying.
How quickly a true toad can go up a
tree! I touched one with my stick
& he fairly ran up the trunk.

The looker

The looks say of the Red-eyed vireo that
it is an "energetic songster", & indeed I
had never considered how really energetic
it was in this particular until today,
when I sat & listened to several individuals
for a long time. I found several nests
more by accident than from seeking them.

Great-crowned
flycatcher

A great-crowned flycatcher had built in the side of an old oak - in a hole made by a wood pecker I think - which was formerly inhabited by flying squirrels. In an old building where I got a chimney swallow nest last year this bird had again built, but I do not know whether she had eggs or young, as I did not wish to disturb the nest. In this

Barn swallow

same house a barn swallow had a nest which was placed on the flat side of a beam. It contained five of the speckled eggs & also a few feathers. It at once flew up as I walked down upon searching I discovered the nest, containing four eggs; probably the second brood.

Red start.

I saw a male red start; do they breed on Staten Island? (They do, June 11, 1887).

On June 13th, 1886, while picking cherries, I vesper maculata disturbed a ♀ vesper maculata & her little nest which was ~~only~~ only as large as a medium sized lemon. I had to knock the insect out of the tree with my hat, until I could get to a safe distance, as she seemed to have a decided objection to my measuring

... it has been very
of late & it will watch it for the
... ..

June 22nd 1886. It has been very
stormy of late, & the little wasp
nest forked of above was blown
out of the cherry tree. The very small
branch to which it was attached
broke & threw it fall.

There has naturally enough been
a great deal of surprise as to the
use of the light giving power in
the common firefly. It may be
for the attraction of different individuals
for the better showing of their where
abouts, in the same way as the long
scintillations in many *Lepidopterous* insects
aid the sexes to connect with each other.

It has again been thought that
they might not be good to eat,
& that their light giving powers served
to warn crabs & other creatures that
prowl about at night & eat insects,
to let them alone. I have often
thought about these probabilities,
as indeed most every one has,
as tonight I determined to do

least - less one of them. I tasted
two of the beetles, & while they were
not unpleasant at first, being not
unlike lettuce especially when of
sown growth, yet - the after effect
were not inviting at least to my
palate & probably, not ^{that of} insect eating
animals. They were extremely bitter
& the taste remained in the mouth
for a long time. Like unlike the
flavour of nut weeds & also those in
churns that every one is familiar
with.

So I think that probably both
the propositions, as stated above,
are true; that the light not only
serves to attract the individuals to
each other, but also to warn other
animals from using them. I mean
by "other animals" the ^{predaceous}
insect eating ones, not the ^{predaceous}
insects which eat almost, if not every
other insect that they can over-pow.

Sparrows at
N.Y. Ferry ship

A few days past, while sitting
on the steam boat just before
she left the ship, I observed an
English sparrow (♂) hopping along the

194

English

beet looking for something to eat. It finally came close up to me & seeing that I was observing it, it stood only a yard away & regarded me for some time, before it moved. It hopped almost the entire length of the boat, & I did not see that it found anything good to eat in all its journey.

These birds also get in the pines & they are obliged to get a ladder, & pole or broom & draw them out on account of the wire they make. The other day one of the ferry boys asked of another one that was standing by, how long those sparrows had been up there & he was informed that they had been in there ~~for~~ house all day. He asked them how they got out.

Scolae conf.

A ♂ specimen of Psycha confederata hatched from its cocoon either yesterday or this morning. I found it in the jar but do not know just where it hatched.

Agrotis c-nigrum, A. clandestina & H. arctica have all appeared but I have taken nothing as yet.

1886

A companion
dog.


Sunday June 27. I walked out today in the direction of the "highest point", alone, with the exception of a dog that I found on Fort Hill & which accompanied me all day. It was a very pretty creature, having long dark brown hair & soft brown eyes, but I didn't know very much. I was coming across a field, in which there were a great number of cows, which always have a dislike to the prowling dog, when one white cow walked towards my brown companion, who ran off to a little distance. I went on thinking he would follow, but he did not know enough to come round the field, or even a little distance off from the cows, but started again along the fence, the way I had come. He did not even hurry, & soon the cows gathered about him again, he crawled close to the fence trusting to their mercy not to put one of their horns through him. I ran back as fast as I could drove the cows away, & made the dog feel very happy, for he covered me over with mud as a testimonial of his affection. Again on the way home I met an old man & a woman

dyke, with a pond on one side & a deep swamp on the other. There was also an other ox in the swamp, standing up to his knees in the water. Long before we got to them the foolish dog became afraid & looting back after a time I found that he had got in some high weeds & was not coming any further. I had to go back and get him, & all the time I was doing the ox from the dyke the dog stood so close to my legs that I was afraid he would trip me. However, he was a good find dog & we shared our lunch together & drank out of the same springs, he always drinking when I did, as if he thought it proper to do just as I did from a sense of imitation.

Wild grapes

Wild grapes are now in blossom and smell very nice.

Two trees

 This rough drawing represents two trees growing along the Turpiter, that have become so completely grafted that they look like the two main branches or trunks of one tree. A, is a white oak. B, is a black birch and the line of junction is about three feet long, or in other words it is about three feet in

where the two found.

On a large stone in a brook I saw a very big spider which I captured. The legs as I have stretched him spread the length of this mark.

_____, & I haven't laid them flat either. The body is also quite large & the legs are covered or decorated with long stiff hairs.

On the same stone with the spider a Spelerpes bilineatus was sunning itself. I do not remember to have ever seen one of these salamanders out in the sunshine before.

Very small tadpoles of Bufo, with their hind legs grown were observed, and also the larval forms of Diemyctylus.

The following butterflies were observed:

Papilio asterias, Pieris rapae (two specimens), Danaus archippus (3 specimens?), Croptus sp., Gomessa antiopa, Neonympha ocyrops, Lycana pseudargyrolus (very common, & very fond of alighting in the woods), Pamphilus cernes, Anglypha munitor, Eudamias pylades & E. tityrus.

I captured four species of Phoradendae on cut timber & dead branches; also a number of other interesting insects. However, the

1886

most interesting of all was the finding of Priocoryphus robiniae on the chestnut. I found three ^{empty} chrysalids & captured a ♂ & ♀ moths on the tree trunk.

Wednesday June 30th. I went out this aft. noon to measure the tree I made a note of last Sunday. I ^{made} a sketch herein pasted, to which I have added the particulars of measurement.

I looked for the wood that I found some weeks ago under a stone, but he wasn't at home. From the appearance of things, however, I think he still occupies the place & that I came too late in the day to find him at home. He goes out in the evenings.

I was in some high bushes several owl came up.

my head & screamed, which

really made me jump though I was expecting to see one very soon. There was also another owl, & the two followed me about for a long time. Sometimes I would stand still and watch one for several minutes.

from road -
Cobra Homestead, Staten Is.

Parakeets

when he would sit quietly on the branch
& talk in those pleasant undertones. It
is fortunate for these pretty birds that
the average specimen of the bird stays
about house at night, for the enterprising
small boy would find no trouble
killing them with the way-side pebble &
indeed I almost hurt one by accident
myself. He had flown from a neighbor-
ing tree & lit on the trunk of a tulip,
holding on to the bark, & I wished to see
after I had watched for some time if he
was standing or bidding to come down
so I threw the pebble but he wouldn't
move. I had to throw several times before
I could get it to fly, & the last stone
went nearer than I intended touching the
feather on the top of his head, but doing
no injury. As well as I could see there
was nothing to be done to save the bird.

the bird
threw

I found a field bunting nest in a
small bush & spent some time in
trying to find the chevron's nest
that I discovered last Sunday. I wanted
to see how the family was getting on
if indeed the eggs were hatched.
How hard it is to find a nest on the
ground when there are many,

1886

is now take special note of the local
Saturday July 3rd. I had a holiday on
account of the exchange closing so my
Aunts, Bessie & I went down the R.R.
We visited two of the three lakes on
the south shore, ^{passing} from Prince's Bay to
Annadale.

Mosquitoes

Cherry tree

The mosquitoes are very numerous & the day
was equally warm, but with all we enjoyed
ourselves & especially some cherries that I
got off of a seedling tree along a
wooded lane. They were quite large
& of a light red color, the tree was tall
bearing them in great abundance. The
red mulberries were also sampled, but
were less liked for cherries.

Butterflies

Butterflies with an umbrella & stick proved
a success in capturing quite a number
of Longicorns & other beetles.

Butterflies

Butterflies — Arctianus, C. thibetensis,
D. archippus, Argynnis idalia (first of the season),
Patalena, C. disippus (first of the season), U.
caerules, Lycaena pseudargyris & U. maris.
L. pseudargyris is very numerous. In fact, as I have
U. maris antiope & C. americana were seen
on Friday (2nd).

But

A quail was heard for a long time
singing in a field, & indicated the

Birds

were a great number of birds seen. I
heard the following species: Robin, wood thrush,
brown thrush, cat bird, blue bird, house wren,
summer yellow bird, swallows, red eyed vireo,
yellow bird, song sparrow, field sparrow, chimney
bird, cow bird, red winged black bird, orchard
oriole, common crow, blue jay, great crested flycatcher,
pewee, kingfisher (observed), cockoo, oven bird, quail
etc. I counted six in all - I didn't think
there would be so many until I counted
them up, especially in a lazy day's tramp
like the present one was.

The chimney
crow

I almost forgot to mention, that in the
old house about which we staid for some
time, the crow still hung in the chimney
or fire place. He moved it back & forward
& it groaned a ~~few~~ more, as if time
had made it sad. There was also a
great profusion of matrimony bush,
some roses, cat ~~birds~~ & a white raspberry
bush growing about this old chimney.

Habit of
Calosoma
perulator

Sunday July 1st. Last night, while sitting
on the piazza, I observed a Calosoma
perulator running across the floor.
After a time it came to a stand &
lowering its body, beat its antennae, partly
by the left one, violently on the
boards. This made quite a loud whirring

do not take special note of this locality.
Saturday July 3rd. I had a holiday on
account of the Exchange closing, so my
aunts, ~~and I~~ & I went down the R.R.
We visited two of the three lakes
the South Lake, ^{extending} from Prince's Bay to
Annapolis.

Mosquitoes

The mosquitoes are very numerous & the day
was ~~equally~~ warm, but with all we enjoyed
ourselves & especially some cherries that I
got off of a seedling tree along a
wooded lane. They were quite large
& of a light red color, the tree which was tall,
bearing them in great abundance. The
red mulberries were also sampled, but
were deserted for cherries.

Walking with an umbrella & stick from
a success, I capturing quite a number
of Longicorns & other beetles.

Butterflies seen. P. asteneas, C. philodice,
D. archippus, Argynnis idalia (first of the season),
P. patula, C. disippus (first of the season), U.
caupus, Lycaena pseudargyria & U. minor.
L. pseudargyria is very numerous this year, as I have seen
Vanessa atropas & C. americana none at
on Friday (2nd).

A quail was heard for a long time
whistling in a field, & indicating the

were a great number of bird voices. I
heard the following species: robin, red start,
black start, catbird, blue bird, blue jay,
yellow bird, song sparrow, field sparrow, chipping
bird, cowbird, red winged blackbird, orchard
oriole, common crow, blue jay, great crested flycatcher,
pewee, kingfisher (shoreside), cockoo, ovenbird, quail
etc. etc. Six in all - I didn't think
there would be so many until I counted
them up, especially in a lazy day's tramp
like it's present one has been.

The chimney
crane

I almost forgot to mention that in the
old house, about which we staid for some
time, the crane still hangs in the chimney
or fire place. It moved it back & forward
& it groaned ~~more~~ more, as if time
had made it sad. There was also
great profusion of matrimony bush,
some roses, catnip & a white raspberry
bush growing about this old chimney.

Sunday July 4 Last night, while sitting
on the piazza, I observed a Calosoma
barclateri crawling across the floor.
After a time it came to a stand &
bowed its body, but its antennae, particularly
of the left one violently on the
boards. This made quite a loud rattling

201
which that a red. has been
found many yards distant, and
I sat about two miles from the
nest & it was my plan to
reach. I approached the nest
cautiously, & watched it repeat
the offensive several times, but
it finally ran to the edge of
the prairie after which the
young I do not remember
seeing the last night.

One fly at I also saw a very well appeared, as
perhaps dragonfly Andromeda, that he came in step
had showed in one eye. I think
it must have hit its head
one of the numerous dead branches,
for I have seen better bees flying
the stems of bushes & plants.

Many bees
In a little while this afternoon I came
to a large gate, one of the posts being
surrounded by a line of honey bees. I
walked near to inspect, but the
bees gathered about me & I "stuffed
the gutter". However, two of them followed
me across the road I had to be
beaten off.

Near the Harbor wall I saw two
rabbits though not both at once.
It is pleasing to see "newly cotton
bolls" skipping about so near home
& stands to the old wall with
its many holes, for preserving them
from the growing deer. This mastiff
There is a field of red clover near
by which I suspect is well known
to them, as it is to many a burr the
best.

Monday July 5th. R. & I went
insect hunting today at Watteogue. The
mosquitoes were so thick that they gave
us but very little peace, & we were obliged
to keep in motion. We captured a few
beetles finding numbers of Carabidae on
dead branches &c, the places where they
usually reside in summer time. Near a
little brook we saw a dog that had
either caught or found a muskrat
& when we approached he made off
in a very comical way, carrying the
muskrat as best he could.

Agrotis While B & I were engaged in eating
some cherries by the road side near
Bull's Head, B. shouted
looking at I saw Papilio glaucus flying

across the field. It gave chase
but lost sight of it in the woods.
It flew very close to us, & I saw
it was no doubt as to its identity.
I also am quite sure as to its identity.
Many birds have appeared in the
garden now, as they do every summer
after the first frost is raised.

I went home from the tramp
mentioned above. I stopped by the
spring in the clover rath, & ate the
remainder of my lunch. There
was a number of horses feeding near
by & a mare became very friendly,
insinuating up to me, frolicking her nose in
my face, my box & my lunch paper.
She ate bread & butter & neighed several
times during the operation, as if to call
the other horses to share the good
fortune.

Katonah

On Saturday July 10th I went to Katonah,
Westchester Co., to visit W. Page, who is
engaged with other surveyors on the new
aqueduct, Lake &c. This place is about
ten miles from Purdy's (Croton) where
I went last summer, & is just at

the head of the present lake.
The survivors live in a cottage by
themselves, & go next door for their
meals. Doors & windows stand open,
then are piles of the latest novels, also
some standard works, pipes, baseballs,
boxing gloves and a great many other
things, to make life roll pleasantly
on.

Robins

I wrote ~~very~~ early Sunday morning,
just as there was a faint light
in the East, & the robins were
singing. I never before heard
such a ~~many~~ warble, for about
here the birds are not so numerous
& never get out in the woods before
sunrise.

Fish weirs

After breakfast Pam & I with my
the dog, walked up the river in
search of the new and interesting.
We found four fish weirs, which
were made by the Indians, &
though they are small & small,
about the country, yet they are
such monuments just for the
memory of the past. The weir was
long & thin, & was greatly
damaged by the Indians.

winter or so; another stretched almost
entirely across the river on a diagonal
a B as at A, but the best one

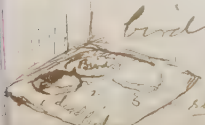


(B) consisted of a number of large
stones which the Indians had
placed in the middle of the stream,
& of which the Indians had taken ad-
vantage in building, using them as the
mouth of the weir. It is said
that the shad used to come up
the river to the locality we visited,
& it is probable that the weir
was constructed for a fisherman's purpose.

Shad.

Phoebe birds
nests.

In a vacant house by the river, I
found on a little corner shelf, a Phoebe's
nest, or more correctly three nests
placed in the angle, probably all
laid since by the same bird at
different seasons. One nest contained
a dead bird, & the other two
one, two live young. The birds were
so thick that the shelf & wall were
covered with them, & the ^{dead} birds in
the nest evidently owed its death
to their attacks. When I touched the
birds they flew out of the nest,
so I captured them & put
them back in their old home.



Looking down on the nest.

not, however, without getting a great many lice on my hands, which it took considerable brushing to get off again. Page was very much interested in these birds, for as he said, it was no fault of theirs that they were over-run with vermin, as it is with the dirt & lazy of the human species.

I saw the first specimen of the season, of A. aybele near the river, & also captured two (♂ & ♀) specimens of H. calanmus. I captured quite a number of insects & a calanus & D. senatoria were found on the bushes.

After passing Wood's bridge a little distance the river becomes very quiet, with both shores wooded, so that a row boat could be used with pleasure. As far as we went it continued this way, getting more wild & beautiful, but as we came to no bridge & as it was getting late we took off our clothes & waded across to the other side, so that we could go home by a new road.

March 11. We went to the river, on the road

prominent high land in the vicinity,
it seems to be a long loop shape, open
round from any direction.

Monday morning I started for the train,
but Ray had the time necessary
to catch it, so we went for a first
that we saw the cars go out of
the depot, we were in the
last corner. We walked upon a high
hill & had a very nice view of Cross
river & the surrounding country. We also
spent some time in watching a
pair of cedar birds building their nest,
for they are always very late in breeding.
They exhibited great deal of confidence
in humanity, not appearing in the least
afraid of us as we stood near to the
nest. It was in a small maple
by the road side.

I know of a pair of these birds that built
in a orchard, where croquet was played all
day within three ft. of their nest. They built
a second nest in an adjoining tree after
the first two were hatched, & so had
one nest of young & another of eggs
at the same time.

Sept 15th 1886. When going to the house
this morning I discovered a black ^{cat} crouching

on one of the small limbs of a
Norway maple. The limb was not
over an inch in diameter, & out when
it was much smaller, sat a
warbler, very still, with feathers ruffled
as if it felt sick. I watched the
cat awhile, uncertain what to do,
as I was quite sure that the cat
could ^{not} catch the bird out so
small a limb. However, a young man
came by who thought he ought to
throw a stone at the cat so my
observation came quickly to an end
though he didn't throw within a
yard of the mark.

I notice that the sparrows ^(English) are very
common in your city, are not very much of the
small boy & the occasional stone
that he throws in the city limits.
Today I saw a sparrow on the
grass in the Battery at which
two boys were throwing stones, lumps
of earth &c, & three times these
missiles hit within a few inches
of the bird, who merely jumped
a little as the earth was disturbed
by its feet for the gun.

very close when it was hopping.
Our station is, if they but see
you pick up a stone, they are
away, showing how thoroughly they
claim the ways of the people about
them.

I would like to state that a few days
ago, I heard the first *O. canthus*
minus stridulating.

O. canthus

Cats.

Richard, the mutton cat belonging to Mrs. Howell,
when got as a kitten a year ago, had eyes
the color of his fur. They changed
gradually, but were still blue, or
blue-gray, for six months.

They are now yellow, and he gazes
at one in a quiet odd way, out
of his large yellow orbs, as he
sits on the back steps in the sun.
I used to keep an account of ^{the color of} cats' eyes
in relation to their fur, when I walked
about the streets of N. Y. There is some
relation. Black & gray cats generally have
green eyes; white & tortoise shell cats more
often yellow ones. I saw a white cat
on one occasion with blue ones but - I neglected
to ascertain if she were deaf.

Shasta 22

Shasta River to N.E. July 20th. Since the
last time we were hunting about Shasta, but
haven't seen much in the natural history
line.

Not a thing

chipmunk

from the

There grows a little shrub
about 10 feet high, and in full flower,
and along the road side I notice the
red apples ~~of~~ growing wild, which I have
never seen ~~in~~ in such a condition on
S. I. As I was eating some of the
wayside cherries a chipmunk with only a
small portion of a tail ran along the
fence, and a young man here, told
me that he had seen one without any
caudal appendage at all. How ever tall
a little chipmunk must feel when he
has his tail pulled off, leaving only the
vertebrae ^{4 muscles} ~~backward~~, by a savage companion.
I have heard this since
I have been here. As far as I know
they had not appeared above ground
on S. I. where I left.

A few days ago I was at home
with some of the boys, who in the course
of their ramble discovered a small
snake, Protophanes sipedon. They were all
glad to see it, for killing the snake
to see it was very much more than the

or at least was six ft. high, I thought
that a practical experiment would serve
good purpose. I cut off my
stockings, went in the water, & grabbed the
snake which I afterwards held up by the
tail. I opened its mouth & showed them
that it hadn't any poison fangs, after which
I threw it far out in the lake, where
it was perfectly safe. At one time it
gave me a little nip, & I also found
how it had bitten me, & yet my arm
didn't swell up, & I wasn't afraid that
it would. The facts of this little
experiment were spread about the town
by the time I was about 10 years old.
I found that I was a well known individual
then.

Achillea &
Echinum

Thalictrum

I went, this morning to Morris pond
with my Aunt, in search of flowers
&c. We observed along the road sides,
the great variations in color in the
yarrow (*Achillea*) & in *Echinum*, seeing
specimens of each species that were pink. &c.
Thalictrum Calanum was plentiful, and it
was interesting to observe, how after
they had alighted on a leaf in
the sunshine, they would turn

leave one as far as possible, as as
to receive the greatest amount of
sunlight. I also think that perhaps
this leaving one was for the purpose
of showing their brightest colors to better
advantage, as many of the series were
seen together ^{flying in the air} & this is the mating time.
I captured two new dragon flies to
me, one being a female I think.

The other is probably a species of *Diplax*.
This afternoon I went out alone on
the Dover road, & then came across
through the fields & woods to the
St. Louis road.

I have seen it before that the
Habit of the animal is very shy of houses & people.
Today I was particularly interested in
seeing one of these animals ^{in a}
a place roof eating cherries off of an
over hanging tree. The house had
several children in it too, were
chatting inside, and the building is
well in the village, being far from
any woods.

When the rails meet in a water
fence, I found a robin's nest of this
summer. It was placed on a
rather flat rail, and with

protection from a overhanging bush.
I should very much like to know
if this robin was not greatly disturbed
by the pecking squirrels that descend
along these fences.

Habits of
squirrel

I saw James B. with his gun
this evening, & he told us that he was
watching for a squirrel that he had
seen pulling the apples off of the tree.
He thought that they merely liked to
see them fall ~~to the ground~~ &
that there was no particular purpose
in mind. However, it may be that
they intend picking them up off of
the ground, as they are ~~seen to~~
come down the tree.

Com

They tell me that the crows
will leave Sparta in the winter
time, as they do Mass.

Saturday Jan. 21st. It is a very
rainy day, and at noon the
clouds hang so heavy that I think
there is little chance of an
extensive outing today. so we
will read "A Walk on the Concord
& Merrimack River".

Sparrows

Quails

Friday July 25th. I have been on a few rides lately and have observed some interesting facts. The quails running along the road in front of the house are particularly noticeable, & when they fly they sometimes go up into a tree instead of in the meadow, or thick grass where they would be much better protected. A few English sparrows are here, and they tell me that in the winter time they flock close to the barn; that season of the year appearing to be the only time when they come before a farmer's notice. I have seen several however, about the streets.

I went out this morning for a ramble, the day being a most perfect one. I have come to the conclusion that the country here affords more birds than I had at first given it credit for, but I do not think there are as many here as at some other places along the Hudson river. ~~which I saw many of~~ that is very pretty feathers growing in the grass as deep as the middle of a sugar maple.

~~the female in the nest
had just laid the egg
and was sitting on it
and the male was
sitting on the nest
and was looking at it.~~

Sugar maples

~~... where I made a ...
... with ...
... the ... I thought, but
I had not ... the ...
... but by ... the ...
... and ... again. I think it was
... first, ...~~

It appears to be the rule to put these
hollow shells or ducts, in the larger sugar
maples, about $1\frac{1}{2}$ ft. from the ground,
& have ^{seen} them close together so that
they ^{would} all drain ...

Honey suckles

~~... at ...
... example, though at
... I have seen these
... the
...
... to
be of the same species.~~

Habits of
Milkweed
butterflies

I tried some experiments on the
milkweed butterfly, as to the length
of time it would "play dead"
when disturbed. Some would
"slam" ... about five

of other ten minutes, but when
they found that they were discovered
while "dead", they vibrated their
antennae & were very anxious to begin
at such times too. They made the
noise which they commonly do by
rubbing their ^{upper} ~~lower~~ ^{rostrum} ~~rostrum~~ ^{together}.
I found a ♀ land turtle which
had dark gray eyes. I did not
look at the under portion of the
shell until I had seen the eyes
then I concluded it was a ♀

Since I have been at Sparta I
have seen the following butterflies:
P. communis, *P. rapae*, *C. philodice*,
E. velutipes, *A. cyathus*, *P. tharos*,
L. disippus, *M. canthus*, *B. alpe*,
T. calanus, *E. americana*, *L. prunella*,
L. c. cyathus, *P. communis* & *P. rapae*.

This afternoon I went to a meadow
(Titman's) down the road, to find,
if possible, one of the small
mammals that make the great
number of burrows which I observe
in wet meadow lands. I am
not sure whether it is the weasel

11 adu
note
I went to this
meadow several
times in the
spring but did
not discover any
of the mammals
though a friend of
mine, who was with
me, saw one.

mouse or star-nosed mole that makes
these runs, but - it may be both. I
think I have generally observed the great
mouse (Pericoma barica) on dryer ground,
they being very plentiful on Carlton Pk
& I. & on Carey's, where there is
nothing but sand, in the way of soil.
Several days ago I saw a small
mammal in Titian's meadow, & that
is what started me looking today.

I climbed up the "mountain" ^{really} back
of Titian's house, & I had to let
myself down by the trees on the
left of the road side, it was so very
steep. A great many high boulders
were scattered all over, & I
learned some of their notes that
were before unknown to me.

Prionus

Prionus laticollis was abroad; I saw
several ♂s flying down the mountain,
& upon going in the same direction
I discovered a ♀ & 3 males.

In the side of this mountain there is a
quarry, where graphite in quartz is found.
It is not worked - now, & in the old kiln
a phoebe bird had built her nest.

phoebe bird's
nest

S. J. J.

Saturday Feb. 24th. I made an all day
ride. This time going around
the Meadows in Nova range of mountains,
is all about 10 miles. The
road I followed was somewhat large
for I often times made little excursions
into the woods.

I captured a few insects, & I think
among them a new Heoperium to me.
I saw the following butterflies, as additional
species, given in my list of yesterday.
P. phlox. P. l. l. 4. integratus
P. abalantia & L. m. m.

Butterflies

Indigo bird

One of the most common song
birds & one of the rarest ones at home
is that of the indigo bird. They seem
to be at least one to every hundred
squares of road.

"S. J. J."

White Bellied

Mel. katote

There has been a bird note entirely
unfamiliar to me for the past
few days, but today I discovered that
it was produced by a white bellied mel. katote;
it was produced by a gray
bird, with a black mark on its
head, something like the following.



I must not forget to mention
in the bird line, the very fine
echo produced by a quail & a wooded
hill. The quail was on a rail fence,

I observed a very curious whistling up
to the "bob-white" series, & every time it
whistled the "white" came back sharp &
clear from the opposite hill. I noticed
that at the commencement of each
whistle - just before the "bob white"
there is a faint whistle, as if in
the drawing in of a breath, which I
suppose is really so.

74 hours
A little way from Sparta, on the Meadow
road, I saw what I take to be a
young bear. It had very long ears, &
I did not see any white fur
but though I did not look particularly
at the time as to its presence or absence
so I may be mistaken. It was quite
young & on foot, looking at each
other in a way, for a long time, till
a ranger came by & long ears went
off. This habit of staring is very
common among animals & particularly
I stood in the road perfectly still
at many a little chipmunk today, &
they on their part stood equally still
& looked at me. While eating lunch
a chipmunk sat on one of the upstumps
in a snake fence & watched me
for just five minutes, when he stopped.

with a saucer, good by, & on gust of the
bark. An old gray wood-chuck too,
watched my very slow movements in
his direction, unlike our sons looking
at each other as near neighbors, & we
continued to gaze with mutual admiration
for a long time.

We went on in a slow walk
the road and as I came
slowly up the road as slowly that
time he appeared. He came
across the road after a time &
ran up & down the road a few, &
seemed to be but a little afraid
of me, but as I was I was not
in a hurry to go.

I saw this first gray squirrel today
that I have observed in Sussex Co.,
for they are not common here.

Sketch of
squirrel

I observed a species of urophila, with
a cat-like bark so large that he could not
fly with it. However, ~~he~~^(or she) did not do
it as ants do, but carried it between
her legs walking very slowly along in an
old wheel track.

The mill race, that flows into the
Hudson river, is a small stream
thru the low mountains, merely

of the Mendocino
mountains.

There are some very small streams. The largest
one of Fairbridge creek also runs towards
being in these mountains & I am
sure of these streams flow into the
Humboldt River. However I doubt of course
today that will empty into old ocean
far apart, little brothers who though
brought up on the same ocean, are
separated by many
miles & follow equally different courses.
Wednesday July 10. I walked to the
top of the hill.

I got a good view of the coast & looking along
the same road came out to
Point Barrow, & then standing through
the woods to the lake.

I got quite a
extended view. I think I could
see fully a mile & one half of
the lake in the direction of Point
though it is hard to judge when
looking from under, as to the distance.

I sat in a boat for a long time
watching the fish jump out of water
on a broken shore line
which is certainly a very charming
feature.

I saw quite a number of

Longer with my umbrella & a
stick - breaking the dead branches
along the road.

2 the 11

I saw a few additional butterflies
to those mentioned on my former
tramps. The, a. c. Grapha microgaster
Grapha progre Vanessa antiope & Monographa

antiope. Vanessa antiope
Vanessa antiope
Vanessa antiope
Vanessa antiope
Vanessa antiope
Vanessa antiope
Vanessa antiope
Vanessa antiope

A cat-bird

While I sat by the lake saw a
cat-bird was singing & I was listening
to his music in honor to him.
So sweet, & with all quite mild
I fancied he was telling me some
of the troubles of his life,
with now & then a note
description of a remembered joy.
How interesting it would be, to be
if only a true history of the
habits of any bird could be written.
While the cat-bird was singing,
song sparrow would. every now &

The blast is with this one & is
high the air - but stop until the
blast has finished, then the other
blast is kept on, as if both of
them were on.

July 29th. I went with a number
of companions to Forestburg to
see the new pig iron & roll up
the iron. The new blast machine was
a great success. It is a
horizontal. There were two rolling
engines & each of them had two of these
large rollers. The engines would rotate
putting air into a large pipe (from the
beginning), from which it was delivered

to a great number of smaller pipes
contained in a furnace, these pipes
being surrounded by burning gas. The
air in the small pipes became heated
to about 800° by this method, before
it was forced into the furnace
the molten iron, & the gas arising
from this furnace (from my coal) was
that which I have described as
heating the air. A portion of this
gas also heats the air & ~~the~~
~~the~~, though they use a little coal to
heat it, so that the gas heats the

boilers, the boilers run the air machines
which air is heated by gas & finally
forced into the furnace where the gas
is burned. Thus there is a regular
cycle of energy each machine doing
something for the other & in a very
small unit of space.

The alternators run them round the day
off into seas & finally the weather in
into the sand waves. When they get a
little cooler they throw sand on the
fire & then broke them up with bangs
& crowd bar. Water was then turned on
& when I left the building was full
of steam, & the fire was rapidly cooling.

Friday July 30th. A dog followed a companion
& myself to Morris Lake today & was a
very interesting beast. Almost as soon
as we met he picked up a stone which
he carried in his mouth & could not
be induced to let it go. When
to a fence he laid it down & jumped
over, but shortly after had found another
one which he carried in its place.

When we got into a boat, the
dog found a stone & brought it in
too, but dropping it he seemed to
lick it up with a vigorously gripped for it & then
the

S. Foster

Saturday, July 21. I was walking along
the Mendocino road, this evening when
I met a man who after the usual
custom asked me. He then pointed
pointing out into the fields, that I
was looking for a little clump
of bushes by the fence side, & he
thought that there might be a
nest there. I got out the binoculars
& looked finding a sparrow's nest
with four eggs in it. I should
not have suspected or noticed
that there was any birds nest
connected with this little clump
of weeds, if this man used to
work in the garden, and
called my attention to it, I
only got to know how much
I owe by the want of
observation, & how ^{unnoticed} ~~unnoticed~~ interesting
facts we pass in the course of
our rambles.

This evening I start for Staten Is -
for home, which is pleasant, and
for the office work which is not
so acceptable as this wood-land
and rocks.

1886

Aug. 10. 1886

no longer dead branches fell down or were
cracking down. among the green leaves
forming a showy & dense in its leaves. The
birds stopped singing & insects were quiet by
virtue that ordinary the nature the now & a
mid-summer day. The ground is even
more clear never & yet how seldom do
we see a dead leaf in the woods.
The woods are the same as many
miserable but then the
branches and many have, like this quiet
one when the birds came to bring down.

Our station Dr. Creeda is a nice fellow
compared to the C. canadensis so common
in our Co. He has been here too but
he is rare as compared to the C. canadensis.

Beating dead branches is not profitable
owing to the many runs of late & early
last night which dislodged all the

9

next to the Hyphae maculata which on the
side of a dead-bark tree. It was about

side of the tree and the so
The tree was

Song sparrow

Thursday Aug 12th 1886

Song sparrows have a great deal in the neighborhood, & indeed, I think

they have been very numerous this summer. An oriole too, makes himself heard every morning, but I am not sure that it is the same one that builds its nest near by. However, it is probable that it is, though it is about time he was gone for the south.

Black ants
& pears

I worked all this afternoon, from the time I came home from N.Y., in picking the large pears that ripen shortly before the Bartlets. I cannot find any name for them in Durrings book, but in all probability they have come into cultivation since the book was written. I do not like them as well as the Bartlets, but the big black ants, that have a nest in the hollow old cherry tree near by, seem to like them much better. They eat very large holes in the sides, some of which are quite deep, & it is interesting to take the pear with the finger & see them retreat to the recess of this pear cavity, & open their jaws in defiance. If poked with a stick they come running out in

great haste, but unless so disturbed they are apt to remain in the fruit for a long time after it is picked in the basket. They evidently realize that something is going on outside & that they had better stay in the fruit until it is quiet. Even all the time that they attack the lady worms in them & when they commence operations they make a great deal of dust & great gnawings which address to the outside of the fruit & can be seen at a distance. All the big pears are picked now & the ants will have to go further away from the house in the cherry tree to find another sweet pear unless they will take to eating some of the partly ripe Bosc pears by. I intend finding out, if possible, which tree they resort to.

Ants nest - Summer nest - see. I have been looking after the ants that have their nest in the old cherry tree, but I cannot discover that they have taken to eating any of the other pears. I saw two come home, one laden with a great caterpillar & the other with a saw fly larva off of the currant bush.

Sunday Aug 15th. I have come out
on one of the hills back of West Newington
where I can see the Newarth valley & to
the Orange mountains beyond. It is so clear
that I can distinguish houses, & through the
deft in some of the hills, I can see
those 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100.

Rabbit

A rabbit jumped through the bushes
just now as I came by, & I hope she
did not scratch herself on the numerous
black berry thorns, in running away from
me. If she only knew how kindly I
feel towards her, she wouldn't run away,
but in what time she would have the
man's hand!

I saw a specimen of P. cardui, the
^{second} ~~first~~ one of the year.

This is quite a good year for butterflies
most of the species being far more numerous
than they were last summer. Almost
none this year has its Papilio, tristis
perhaps being the most abundant species
just now. P. glaucus is abroad, I
saw a specimen on a thistle, which I

1886

captured with my fingers but afterwards let go. I see but very little of D. tennes, but the beautiful Limenitis ursula, being somewhat plentiful this season, makes up in a measure for the scarcity of our large yellow Papilio. I have seen two specimens of D. archippus so far today, but in a week they will probably be in force. Crickets are now casting their last, or pupa skin, for I found one of Gryllus under a log.

Pupa skin of Crickets.

Katy dids

August 18. The Katy dids stridulate now; I heard two this evening.

Sugaring

August 14. I went out this evening in some thick woods to "sugar" for moths. I wished to try what success would attend a trial in such a locality. I captured nothing, though to be sure, the night was cold & I also got a cold in my head.

July 21st

Then were several Katy dids near by that were very entertaining, one of them has something the matter with his singing apparatus.

White-bellied

swallows

Baltimore

Friday August 20. The white-bellied swallows have appeared. I saw a flock today on the telegraph wires. The Baltimore orioles

Saturday Aug 21st. I found. Some more pears
on the tree near the black ants nest-
today. I thought I had picked them
all off. But the next one of this
lot, the ants had tunneled, so
that there was but a thin wall
between their cavern & the the rose
colored outside. This accounts for
their not visiting any other trees,
though I am still quite sure that
they will cut burrows in a dry or
iron, very pear, from all that I have
been able to observe. The little
ants attack the barthels when they
lie on the ground, but I have
never found any tunneled hanging
on the trees. And even when the
little ants attack the pears on the
ground they are not apt to make
the extensive galleries (if they make any
at all, which they seldom do) that I have
observed.

Sunday August 22nd.

Went to Pleasant Plains Station ---

Spent it in roving about ^{near} the clay beds
on the low hills side.

heads he picked up an arrow head, and
found some pottery in going across field.

If I had any implements to be found
all in any field, it is generally on
the highest point.

We discovered Butbatia chloroides for the
first time reported by Mr. Eadie from Chelsea & there
was a great number of other interesting
plants some of which I brought home.
The sunflowers are now in their glory,
& the pretty cardinal flower blossoms
along the brooks. Cassia's yellow
flower is common in some of the
fields, & the purple bean comes
about the golden rods. We saw one
such bean & golden rod, locked together.

Dandelions are
in flower at this season, their
day of rest being over.

It is rarely that we see any chipmunks
on the sandy portions of the Island where
there are but few, or no stones. Today
however, we saw one & heard a second
in the vicinity.

Butterflies

I noticed the following butterflies:-
P. asterias (numerous), P. troilus, P. turnus,
P. protodice (1 specimen), P. rapae, C. philodice,
D. archippus, L. urticae, L. didymus

Luna californica I found - a Luna caterpillar, nearly
full grown on the Sweet gum.

Fodder "

Apples, black berries, black plums, huckleberries
& elder berries were plentiful, & we in a
week or two lived off of the country,
I think the measure that would hold
all winter would indeed be a
help one.

ys part, and parting
tonight, faint little "peeps"
as if some birds were flitting
overhead. I think that
some of the Summer warblers
must be on their way south,
from their northern home.
The white-bellied swallows have

Deformed Bartlett Pear. Aug 25th 1886

Bird migration being now, I particularly
noticed them this afternoon.

They, I think, are the same as
the ones I saw in the spring, and other
birds are also coming in. I saw a
couple of 2nd at home for it was
as well as was there as in the road
back to the house. So it has come
out to see what I have found in
the country.

Golden
crowned throats

on the ground. The ground covered the
with the birds. I watched an
for some time as it was about feeding
for insects. Finally it was
Drumming which flew up with a start,
and quite lightened the little bird. I
saw several others. I also heard the
white-eyed birds singing.

White-eyed

after finding an Indian implement at
the village, where the grave
stone, the one that I visited last winter,
was so cold that I could not
go to copy the inscription. The following
are a few that I copied today, they being
the only ones.

From stone inscrip-
tions, from grave
on hill back of
Richmond, near
hill where old
British fort stands

In Memory of John Bedell Son of
Hannah Bedell, who departed this Life
on the 8th Day of June 1807 in the
59th year of his Age.

I leave the world without a Dear
Son for the Friends I ~~had~~^{love} so dear
To heal their sorrows Lord descend
And to the friendless from a friend.

White marble faces 3 &.

In Memory of Catharine Wife of John
Bedell Who died Dec 15-1833. Aged
81 years.

on a hickory. The golden crowned thrush
was in the woods. I watched one
for some time as it walked about looking
for insects. Finally, it came upon a
Dew — which flew up with a start,
and quite frightened the little bird, who
jumped several inches. I also hear the
white-eyed vireo singing.

af. This is an Indian instrument at
the house. I picked up the bird in
of Richmond village. Near the grave
stone, ^{are} the old that visited last winter,
but was so cold that I could not
copy the inscriptions. The following
are a few that I copied today, they being
the oldest ones.

In Memory of John Bedell Son of John
Hannah Bedell, who departed this life
on the 8th Day of June 1807 in the
59th year of his Age.

I leave the world without a tear
For the Friends I ~~had~~ so dear
To heal their sorrows Lord descend
And to the friendless prove a friend.

White marble base 3.6.

In Memory of Catherine Wife of John
Bedell who died Dec 15-1833. Aged
51 years.

May we like her prepare to meet our God
 And rest our home in yonder bright abode
 So may we live that we may meet her there
 And wake from death a higher bliss to share.

White marble, faces S.E.



(The bones look more like bones cast
 on the stone than what they are
 intended for. But mine do not resemble
 the original particularly, either.)

In Memory of John Bedell, who
 departed this life January 7th 1781.
 Aged 63 3 months & 13 days.

In Memory of Ann, Wife of
 Moses Doty who died July 17th 1783.
 Aged 48 years & 11 months.

In Memory of Moses Doty, who
 died March 7th 1785. Aged 53 years
 and 7 months.

See Nov 8th 1858

There were other stones to the memory of
 Susan Trinant, aged 59 years; Jacob Trinant,
 aged 61 years; Hannah Cole, aged 87 years
 and several to the memory of members
 of the Decker family.

Last time I climbed up this steep
 hill to look at these stones, the
 cold winter wind drove me away,
 for it is a sort of sugar loaf.

and the windier felt sweeps over
it, ^{driven} from the meadow side.
Today, while I was copying the inscriptions
it came out to thunder violently, & I
could see the black clouds. I left
for the station but it did not
rain & the country is as dry & sunny

Butterflies

The following butterflies were observed:
Capitea calvaria, Pieris rapae, Colias philodice,
Danaus archippus, Argynnis idalia, ~~the~~
tharos, Vanessa antiope, Pyrausta sp?,
L. usula, S. alope, Ancyloxypha
minutor & P. peckius.

117
Richmond
The way to the station I came
through Richmond village, by old St.
Andrews church and across the bridge.
There was one little stretch of street
with quite a number of houses on it,
but they were the most broken down
lot of dwellings I have ever seen.
Piazas fallen down, one quite large
building on the right leaning at an
angle, and almost ready to rest its timbers
on the ground. Indeed it struck me
that there wasn't a whole shutter in
view. The houses too, are built in very odd
positions as regards one another. However,
all Richmond is built as I have described

1886

Tuesday Aug. 31st. It was only two or three days ago that I noticed the first grapes turning color, and now nearly whole bunches are purple - so fast do they change when they once commence.

Sunday September 5th 1886. 10

An old well

Old Place battery, Followed the shore around coming home along the Turnpike.

I drank out of an old fashioned well near Old Place mill, the bucket being made of 9 pieces of wood & heavily hooped with iron. Pieces of wood had been driven in from time to time to keep it from leaking, so that the numerous mendings lent an additional charm to the old bucket hung by a crane.

Amherst
hay

At lunch time, after considerable effort, I succeeded in getting on top of a stack of salt hay - a very large & a very high one. Then I sat and ate my lunch, looking out across the meadows away to the Jersey hills.

I could not see the hills in many places, & the boats passing seemed to be moving over the meadows themselves.

~~My little dog came to the top of the steep side of the stack.~~

Dykes along the shore. All along this shore there is a sort of natural dyke or dike, which keeps the high tides from overflowing the land, & where there is any opening, artificial dykes have been built. In this way, Mr Merrill told me, much of his land had been preserved, for when the salt water overflows ^{there} it occasionally many kinds of vegetables cannot be raised. This is the case with the common potato, but ~~the~~ it is not so with the sweet potato, which was

growing on land ^{part} that had been under water this spring.

The elm trees planted out along the real country roads do not seem to be at all visited by the elm beetle. I observed the following butterflies:

P. asterias, *P. troilus*, *P. rapae*, *C. philodice*,
D. archippus, *A. nympa*, *R. thanaos*, *G. interrogatoris*,
Vanessa antiope, *L. urticae*,
L. disippus, *S. alope*, *C. americana*,
L. pseudanixius, *A. numitor*, and *P. p. p.*

Many dead leaves are falling now along the roads, & in the swamps the red maples & sour gums are rapidly changing color. I saw many very brightly tinted ones in the Magnolia Swamp at Westport.

18th
Migrating
birds at night

Monday September 10. The main migration since
last year is still here. The electric light
songs of birds passing over. I think it is
the newly established amusement grounds,
with their many electric lights, have attracted
the migrating birds, in the same way
that light houses do. I have never noticed
them on September evenings of past years
& it is for this reason that I think the
birds have altered their course, they having
altered their course a little from the
one they used to follow in their
down the valley of the Hudson.

Sunday September 12th. This morning while
looking for a campfire in the woods,
V. anthopa (which I didn't find) I discovered a *V. anthopa*
asleep on one of the main stalks, when it
had evidently been all night. It took
a great deal of poking to make it fly,
away, for I suppose it was asleep.

On the 9 o'clock train, I went
to see Mr. Brill and called on Mr. Brill
& he was taking them a number
of fungus growths. He proposed me
was staying to dinner, and he was
well after noon still. Brill & I went
for a ramble on Cross's lot. - The
Highland of New York.

I saw no white-bellied swallows flying about - as is probable too late, they having gone south. It was May 8, last year when I noticed them in such numbers at this point. However, we saw two considerable flocks of plovers, (species unknown) and they were indeed very beautiful. In their flight they follow or fly in such parallel lines, with regard to one another, that the general effect is very pleasing.

Foods

Foods were numerous on the salt meadows & so were the Golden Crabs in places. We captured a number of these crabs, seemingly of two species. One kind had a black or -throat, mottled with blue, while the throat in the others was bluish green, with no any mottling. The first-named kind was also found much further from the water than the other, some of them running about the sand a long distance from their burrows. I intended looking these crabs up, to see if they are really distinct, but have had better luck yet.

(Monday morning. Upon opening the box in which I had kept these crabs over night I find the blue-green backed ones dead, while the others are all alive.)

At five beach-plums were left - but were

HOUSES UNROOFED AND MUCH DAMAGE DONE BY THE WIND.

A blacksmith shop torn from its foundation and wrecked in the middle of the street—several vessels capsized in the river and harbor—Excursionists and others in great danger at Coney Island.

A cyclone of remarkable energy swept down upon New York, Brooklyn, Jersey City and Long Island last night, just about the time people were sitting down for their evening meal. It came up from the southwest with the speed of a meteor, gaining power as it progressed, and finally burst in all its fury, causing great damage in several places. It departed as quickly as it came, but it stayed long enough to play havoc here and there. It was accompanied by pouring rain, sharp streaks of wicked-looking lightning and warning peals of thunder.

It caused more trouble in Manhattanville than anywhere else. It swept up from Riverside drive like a runaway, and crossing an open lot not far east of Don Grant's tomb, picked up a blacksmith's shop on Manhattan street and hurled it with great force against the dwelling-houses on the opposite side of the street. The heavy timbers of the building were thrown with such violence as to shatter two buildings, damaging one irreparably and shattering windows, shutters and doors in four others. Trees and telegraph poles alike succumbed to the storm and were thrown crosswise on the streets, into dooryards, and the splinters from the wreck were even carried into remote backyards.

I captured several of
Conoccephalus *Conoccephalus* that I
(*C. robustus*) ago on the meadows,
yet I have got no
I approached the stone
would drop to the
often find them there
without the danger of
suppose they were
& this position offered
of their bodies to rise
The following butterflies are

Danaus archippus (in great numbers), *P. thoas*, *P. antiope*,
P. alexandria, *L. urticae*, *C. amandus* & *A. numitor*.

A storm when we were out on the river it
commenced its thunder & by the time
got to Mr. Winton's house it was raining quite
fast. Mr. Britton sent me an

of the ripeness had been picked. There is
a great difference among these bushes, as to
when their fruit ripens. We found some
on which the fruit was very green yet,
while on others it was far advanced. As
a rule I think it is safe to say, that
the younger the bush the earlier the
fruit. At least this appeared to be
the case, with those bushes that were
examined.

Conceptula ~~*Conceptula*~~ *Conceptula* that I took several years
(*C. robustus*) ago on the meadows, near the Point. As
yet I have got no name for it. When
I approached the stridulating insects they
would drop to the ground & I could
often find them ^{actually} standing on their heads
without holding on to the grass stems. I
suppose they were very much frightened
& this position ^{causing} offered the smallest portion
of their bodies to view.

Butterflies
The following butterflies were observed: *P. info*,
Darius areopha (in great numbers) *P. thers*, & *ant*

A storm
When we were out on the Point it
commenced to thunder & by the time we
got to the house it was raining quite
fast. The water was very high.

to get to the station with, but the
storm was so severe that it did
but no little good. However, when I
arrived at New Dots station the storm
had abated little, and as there
was no rain, only a little wind
I had some time to wait for a train.
I thought I would walk to Garrettsville
Station. I had not made over a half
mile when it commenced to rain
violently, the water coming down in
sheets, & carried by the wind
with great force, so that I was
to the skin in a few moments. I
do not think I have ever been out
in such a violent rain storm before.
It did much damage about the country
blowing off roofs, & upsetting pleasure boats
in the bay.

1886

Friday Sept 27, 6.15 A.M. It is very cloudy this morning
and on looking out of the window, I observe a
great number of swallows going south. I have not
been able to distinguish the species.

I must have seen the end of the
flock, for at 6.50 A.M. they appear to
have all passed.

Saturday Sept 28. I walked home
from Port Richmond Station this afternoon.

Today.

11th. In the morning. A *Hyla* was flying high over the ponds, and on a wall I found a *Hyla variegata*. The frog was in the sun shine, and it was interesting to note how moist the stone was on which it rested.

Sunday September 19th. 1886 I went Richmond, though it looked as if it would rain, yet I came home with a dry coat, not like the one I wore last time.

With hares

I noticed several fish hawks again today, one was perched on a large stone on the banks of the ponds in the little back of Richmond village. There are several very charming meadows in the hills. The fields are surrounded with wood land & one of them being quite small the effect is something more like, with walls of green trees. In this particular field the mole tracks or burrows are

Charming meadows

Moles in meadows

numerous and it would be a good locality to study their workings for as far the earth be cleared from stones & such the stone shows up. In one of these fields there have been large holes (pigeons) and the time when the birds were

From the
cave

A. fraxinea, I think A. caroliniana, was seen
flying about, but it escaped.

While I was running along the edge of
a tangle of cat-brier on the borders of a
thick wood, I noticed a large stone
ahead, and as such rocks are not plentiful
just now I was at the time, I made an
effort to climb through the thick growth
to its vicinity. The spot proved to be a
small open space surrounded by woods,
and I had seen some wilder rocks, and
the different species of Eupatorium grow
to any better proportions. In this open place
lay the large boulder, and as I approached
I heard something move off, but unfortunately
I first looked in the wrong direction. When I
looked the other way I discovered the cause
of the noise that I had heard, for I
observed some quite large animals skulking
in the bushes, but I was unable to make
out what it was. From the situation,
movements &c I am inclined to think that
it was one of our large mammals,

Some large
beast?

that I had surprised
while running himself in this place.
I heard two Cicadas give a joyful
whir, in the middle of the day, but as
it clouded up, I heard no more of their music.

25

E. fasciatus

Perhaps the most interesting thing that I observed today, was the attention that a male E. fasciatus paid to a female as they sat on a branch of a small tree. There were quite a number of these insects crawling about on the several small trees of this kind, and they had for the most part very black legs & some black markings about the head. I do not know the specific name as yet, but it is not nivens, as the stridulation is continuous and not pulsating as in that species. Several insects are called E. nivens, which I think belong to different species. When I first saw the male & female insects in question, the ♂ was bowed down on the cactus-like tree though ^{it was near the ♀} and with his fore wings elevated stridulating faintly every little while. He did not under these circumstances, keep up a continuous "long", as did the neighboring males that had no wives in view. Finally the male moved backward with his fore wings still erect over his back (as when stridulating) and the female came forward a little so as to rest her abdomen on the abdomen of the male. She then, as far as I could see, for I didn't dare to go too close lest I should disturb them, gently stroked his thorax at

base of the secondary wings with her feet
all the time this was going on, and
it was a good while, the secondary
wings of the male insect were alternately
pressed & relaxed on the sides of his
body & his antennae were vibrated
very rapidly. The antennae of the
female (Eucanthus) were braced against
his ^{for} ~~sad~~ ^{single} ~~and~~ and did not move or
vibrate at all, probably because they
couldn't ~~be~~ ^{be} in such a position.

I watched these insects for about a
half hour, and the ♀ running away on
one occasion it was interesting to see
the ♂ looking for her, running up all
the leaves and ~~stems~~ ^{all branches}
until at last he found her on the
end of one of the longest twigs, when
I observed the proceedings as described
above, gone through with for the second
time. About this being complete

there was a poor lone male with
^{five legs} only ^{being gone} one hind leg, and occasionally
he would approach near enough to
touch the others with his antennae,
but would quickly retire after doing so
as he was evidently ^{only} ^{an} ^{unlucky} ^{one} of the more
fortunate six legged suitors. One ant

1886

but I saw no water more after another in
a way that betokened no good trip.
Many of these insects that I saw, as
they were near me, had me for a leg
gone. Last year I captured a few
~~yellow~~ ^{of this species} ~~males~~ near the shore at
Totterville, & also several at Newport,
N. H.

As I walked along I tapped a dead
tree or high stump, only 3/8 in. in diameter,
when I saw a flying squirrel ~~and~~
almost hit me in the head, such was
its haste to get away. I do not see
how it could have been very comfortable
in such a small nest.

Near the flying squirrel above I dis-
covered a very large cedar for one
grown in the thick woods. It measured
5 ft 1 in. in circumference. It had evidently
once been forked near the ground, but
one side of it had broken away long ago
& left this very large half standing.
Up in its top there was a ~~small~~
nest, but I did not climb up to
see how many flying squirrels it
contained.

C. dissimilis & S. curvicauda were
stridulating, though the dark, ^{characteristic of the} day

1866

chat with the merry maker, none of which was over heard by those near by. When the conductor had gone, the dancer for beer said that he ~~reported~~ told him ad was Sunday whereupon he down on his knees, and danced the remainder of the time in that position.

I noticed the following butterflies on my walk here through the woods. Papilio troilus, Papilio sp?, Pieris sp., Colias philodice, Terias lisa, (first one of the season). Danaus archippus (one being deformed, both hind wings small and of but little use), Phynodes tharos, Grapta sp?, Panassa antisopa, Pyrausta lunifera, Pyrausta carolina (plentiful), Limenitis sp., L. disippus (single one), C. americana, Lycæna pseudargyrota and A. umata.

I saw a Thistle finch on South Am. that was a very decrepid looking bird. They are now shedding, and this poor fellow's feathers, were in a remarkably disordered condition.

I looked at a great many of her webs as I walked along, and there was one species that made a very odd, full, loose, for itself. It was quite a large yellow & brown bird but not the size of the black fellow it was near. Some of the strands,

nests that I saw. led to leaf,
that the spider has turned or devised
to be a leaf.
Sincerely



In the middle of a clump of dead stools that
I picked, I found a Wood frog (R. sylvatica
or temporaria) had installed himself in the
cool retreat. All the water (except by the brooks)
in this small wet wood, had dried up, &
this was the most moist place for a long
round.

sects under the bark of
the white birch. The blue bark borer is a good place for
butter, for by nipping off the bark many
can be found. However I didn't do much
of it, as I felt sorry for the
poor trees that looked so unnatural
after I had robbed them of their coat.
I captured a new Catocala? flying
about an aster or golden rod, I neglected
to draw which. This is quite an addition
to our S. I. list. It was one of the yellow
underwings. (Hypocata Hillii was the insect upon

In the swamp near Bull's Head, I found
three herons, I think they were ^{young} trigres herons,
but they flew away before I could

A large
brown gr

a good look at them. Also near
the Bull's Head, I found quite a large
box gum tree, seven ft. ten inches round.
It is hollow, & in the center had been
placed ~~post~~ ^{which} ~~it~~ formed a
for a fence, the rails & tying the tree
by two holes at about right angles to
each other. The tree was old and full
of holes & was, which were haunted by
squirrels and wasps. As I approached
the tree quietly, I saw a Gray squirrel
climb the log can, where the post
was, and go around to the other side
of the tree & into one of the numerous holes
near the top I suppose, for I could
see nothing of it when I got near
the tree. I saw a young one, a young one,
or at least it was small, that permitted
me to get quite close to it. I watched it
looking for something to eat for a long time,
& finally it found an acorn I think, and
made off to a large hollow chestnut tree.
I really see more of the gray squirrels
than I do of chipmunks, which appear
not to be very plentiful. I know of no
place but side ^{south} where they are to be
found, but I see but few, except in
these particular localities.

About gray,
on red

1886

Sunday, Oct 3d. This has been a
pleasant Indian summer day, warm
and mild with the crickets singing,
and we spent it on the south side
of the island. The fruit is
now ripe, though few have fallen,
but the bars are open on many
of the trees. Cat-birds still linger
in the woods, & we saw a Red-bellied
nuthatch & heard the very much more
common White-bellied one. However, I do
not hear the White-bellied nuthatch so
very often on S. I. though in most places
northward it is a common bird.

Monday. There was one poor lone Cicada singing
faintly, for he is no friend of the
past cold days, and will soon die
a victim to the north wind.

On a road running parallel to
the R. R. track, we noticed one
of the best whirlwinds that I have
ever seen. It was made evident by
a small column of dust, that whirled
along the road for a great distance,
& was finally broken up by striking
a cow. The affair indeed, was very
mild, but an even more violent one
could not be seen.

Crows' ways

A great flock of crows were flying round & round in the air, circling in much the same way that swallows do sometimes. As we were in the park I had an opportunity of watching them for any great length of time.

Cassia bean

In the Cassia bean I noticed a pest that is new to me. I also found some in an undeveloped condition.

Bugs

The following butterflies were flying: - Papilio astinias (one), Pieris rapae, Colias philodice, Danaus archippus, Phyciodes tharos, ^(one) Glyptotendipes, Danaus auripennis, Pyrausta atrolanta & P. cardui.

Persimmons

Persimmons are ripe, & with apples and a few other fruits we had a fine feast.

White butterflies

Monday Oct. 4th 1886. As the boys were going in the M. Y. dock this morning I noticed a beautiful butterfly swallow flying down the bay. As they were at evening I heard that there had been a lot of them. As many specimens of P. minor there was also a P. retenera and an occasional Proteus apilis.

White butterflies

but the days of their night vision but they are nearly at an end, and the evening are quite dull.

1886

On bumble

Tuesday Oct 5. In a little patch of thistles that I walked through this afternoon, I could find bumble bees clinging to the flowers. It was almost dark & the bees had gone to sleep on the thistles as night came on. They were all large females, and are evidently to be the founders of new nests.

Gull in Bay

October 6. I saw a single gull in the bay this morning.

"If the sun view red and goes to bed - soon
We'll have rain before night - if not before
old saying

Gull in Bay

October 9. I saw a second gull in the bay, near Governor's point.


On the position
of a chrysalis

Some time ago I found a chrysalis of P. rapae that was fastened to a smooth painted board in a vertical position. It had been attacked by ichneumon's ¹a, head. ²Salmon of the 18th was sitting on the board near the chrysalis at the time I looked at it.

Katy-dids

October 10 (Sunday). Yesterday was so warm that it quite revived the Katy-dids, & I heard many in the evening. Today was also a pleasant warm one for this season of the year.

& the insects ^{of} autumn are all
in force on the sands about Richmond
Valley station.

I noticed a cow tethered in quite an
original way as I rode along on the R.R.
There was a rope stretched along the fence
for quite a distance  & on this rope was
a hook which was fastened to the cow.
The cow was attached to this end
of the rope & was able to move for quite
a distance ~~up and down~~ along the fence.
The rope being stretched as the wind
came from place to place.

The following butterflies were observed:

Pieris rapae (abundant), C. philodice (abundant), P. thers
(several specimens), Grapta sp? (one specimen), Vanessa
antipha (several specimens).

At about 10 o'clock I heard P. retinera
stridulations. The sun shone brightly at the
time, as it did all day. C. dissimilis
was also to be heard near by, and it
is very evident that as it gets later in the
autumn these insects stridulate more
frequently in the daytime.

Gryllus abbreviatus was quite plentiful along the
border of a field, the ♀'s for the most
part being busy in laying their eggs.

At 11.15 A.M. I observed a common mole
moving under the loose sand, and
after watching it for a while I made
a sudden jump & captured it. It
was eating a mill beetle ~~at the time~~
which it did not relinquish until some
time after capture. I placed it on
the surface of the sand & it remained
quite for so long a time that
I surmised it had lost its way. After
a while it commenced to dig, and it
took it little over a minute to
get below the surface, though the
ground was loose & sandy, such soil
as supports poor grass (Hudonia) which
grows in the vicinity. It very shortly came
to the surface again & moved to a
new spot, ~~and started~~. Here in
about the same time as before it
was out of sight, & appeared to travel
in a cork-screw fashion straight down
into the soil. After it had gone a
little way I dug carefully after
& followed it about a foot below the
surface; it digging quite fast after the
first few inches had been made, & until
it got below the grass roots &c., that are
always on the surface in a thick mat.
The mole was about 3 1/2 inches long.

I had a very close shot at what
I should like to designate as the effects of a
hairy wood pecker, to enlarge on what
it is called. I saw the piece of wood
being thrown up after watching a little
time, & by & by the bird saw me & flew
away in a frightened manner. I was
very sorry that I had gone so near.
I saw several other woodpeckers of this
species during the day, and one of
them, that was on a fence post,
hopped backwards (tail first) towards the
ground for nearly its whole length.

About lunch time I met a black
snake, & after playing with it for a
time & trying ^{in vain} to get it to either
run or follow me when I ran, I
sat down near it & commenced to eat
my lunch. Bascarium looked at me
from about a yard away & kept at
the same position for a long hour,
then it moved off, going
very slowly & did not go
any faster, ^{either} when I pursued, nor
would turn about - I shot.

mild form. I noticed that when
it moved among the bushes & grass,
though undisturbed, it continually wagged
its tongue as if to tell every thing that
lay in its way. I should also mention
that its snail had lost most of its
tail, the stub being very blunt indeed.

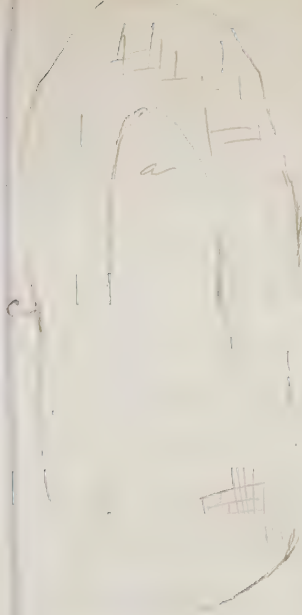
Doves...

It is doves are not uncommon
this fall. I saw three today & several
last Sunday.

Land turtle
(Carolina dove)

A male land turtle that I examined
had scarlet eyes. I try to tell you
what this is with by first looking
at the eyes & invariably get it correct.
The shell about the head in the
specimen mentioned, was gnawed for the
space of an inch and one half. But
the large hole that looked to get
into the shell is not a mistake
as to the true nature.

I almost forgot to mention that I
found a very interesting Indian influence
near a creek here. Some boys had used
it, & several other stones, in opening
stone mounds, without knowing evidently
what it was that they were finding
with. The rough figure that I have
drawn is of natural size.



represented at a as worked
out. There is also a similar
depression on the opposite side.
The idea at b & c shows
evidence of use & it may
be that these were the
portions of the stone most
employed, the hollow only
being made to afford a
better purchase when
grasping the implement.
The ends are also slightly

Withered out
birds.

I found two withered out birds, about
twenty ft high. Up to this time but one
bird had been discovered on the Island
Tuesday October 13. (A ^{time} red bat was brought
to me today by about twenty of the
members of the N. Y. Prod. Ex. It had
been captured in one of the offices &
I was invited to give it a name,
which I did. I brought it home &
laid it on the boards that cover the
coal bin. I wished to see if the bat
could take flight from a perfectly flat
surface, & it
did ^{so} most effectively. There was but
my little white about this specimen &
it appeared to be rather a young individual.

1896
S. in. Oct. 24th. It has not rained for
a long time & the woods in consequence
are very dry. In many places they are
on fire & I worked for quite a while
back of the Moras in cemetery, trying
to put out a fire. I succeeded in
burning a tract of swamp (that
had become so dry that the leaves
were burning on the moras ground.
Several wood frogs (*R. sylvatica*) were
jumping along as the fire advanced,
& I noticed a mouse come down a
tree a little way ahead of the
flames, but I think it was the
disturbing cause.

There are very few nuts this year,
that is hickories & chestnuts, but I filled
my box with wal-nuts. I did not
find one chestnut though I
searched a little. Howard persimmons
were good, & so were a few apples that
I found but I did not stick to one
one that had been enough to come
when I showed her an apple at quite
a distance. Near one of the apple
trees I saw a white rabbit, that
took to some underbrush as soon as
it discovered me. It had evidently
been investigated.

found a stump or stub, inhabited by three flying squirrels. When they jumped off or "flew" to other trees, as I noticed particularly did not come to the bottom of the trunk. Last he jumped, but directed his course to a point quite high up.

B. thompsoni

P. rapae (1 example) & C. philodoria, (plentiful, ^{species of}) were the only two butterflies I noticed.

C. p. exilis

I saw a green Tamias on the wing, evidently looking for winter quarters.

H. l. v. color

In hollow in tree barked much the leaves of dead wood leaves &c, we found a Hyla versicolor. Does it spend the winter in such a situation?

Black snake

A black snake was running itself & made off at a very rapid rate when approached.

Bartholdi, Statue of Liberty Day, Oct 28. In spite of the very heavy rains for the past two days the swamps that had been in fine condition, and it will need all the help of rain, & a week perhaps, to get the water out.

I want to mention thinking that I am able to find some more

of Indian implement, for some of the
stones are - they show more plainly
than at other times. I did find
of the best hammer stones, & it has
been my fortune to discover, & find
also a few other implements, but nothing
very remarkable.

I saw one immature bird that had
very downy fruit, but all
the same it was very young. I kept
it with a string & it is now hanging
up out of doors to ripen.

Brown creepers
& red bellies
Three of the creepers & a white bellied
bird were making one another company
& also extending their friendliness to me.
The brown creepers flew away after a time
but I noticed the white bellied bird
longer. He would often sit upon
a branch, especially after the creepers were
gone, & call his rather doleful note
as if he wished for their return.
While they were present he was always
busy, & moving up & down the tree
with them. Certainly these birds must
find pleasure in being near one another,
otherwise we would not find the different
species so numerous, and so, perhaps

226.

is not fancy alone that made the inter-
hatches notes seem so plaintive.

Large cedar
and wood

I measured a large cedar tree, but
the string is in another pocket. However, I
will put it down later on. (In the office in morning)

Election Day, Nov 2nd, This is a remarkable
autumn - so warm and pleasant, and
today was all that could be desired.
The usual Election Day session of all
the natural history tramps that care
to go on such a rainless, warm day,
and about this - people got off at
Annadale Station, walking down to one
of the ponds near the beach, & back through
the woods to Eltingville.

Twittles & Snakes

A number of twittles & snakes ^(poor, snakes) were
sunbathing themselves, & I heard a "Katy-
did" (*Cyrtophyllus carolinensis*).

Red-bellied

Some habits
of the

tried to make a specimen of the
little striped ~~snake~~ ^{snake} ~~resembling~~ ^{resembling} ~~light~~
with a straw, as I did so successfully
on her in June, but it did not
succeed this time. However, she, or rather
she did not object to eating a piece
of apple that I offered, and it was
interesting to see her head move sideways
up & down as occasion demanded, so
as to get the best ^{possible} bite at the fruit.

4 dragon flies

Butterflies

damselflies

A great number of grasshoppers, and there is about 4 we observed the following butterflies. Pieris rapae, Colias philodice, (both common), Danaus archippus (two specimens), Vanessa antiope, Pyrausta, atalanta and P. huntera.

We saw one damselfly that had a great deal of spider web attached to its body, and as it went flying over the field the web floated a long way.

The grasshoppers & dragon flies mentioned above, belonged to but few species though great in numbers.

It cannot be judged how warm the day was, when some of the party found it too hot sitting in the sun

& retired to the shade of a tree to eat their lunch. A few leaves ^{only} remain, & they ^{are} falling down as you sit under the branches, rustling ~~from~~ against their dead & dying companions until they fall at your feet - ghosts of their summer selves, though ~~autumnal~~ ~~more beautiful in death~~. It causes us

sorrow to see a poor weak butterfly flit across a field on its last excursion, and ~~also~~ ~~also~~ an old one lie ^{leaves} on the ground.

somehow the dropping of the dead ^{leaves} ⁱⁿ autumn though part of the funeral procession of nature does not bring up the same feelings, ~~the~~ ~~sorrow~~ is not so deep. Yet it is

1886

as natural & it is as the leaf to the
& perhaps ~~that~~ it is only that the leaves
are always falling, & lie dead by the
thousands about us, - so that it is not
that we do not notice them as new,
when the butterfly & the old oak
tree, with its last apple, appeal more
directly to our vision.

Sunday Nov. 7th. This has been a
cold, wintry day with an occasional
gust of snow. Still I saw a
butterfly in a sunny nook, but
could not tell whether it was a
pyralis or a Pyrausta. It was in
such a place when I approached.
I saw several flocks of birds of
different species; for the most part
of chickadees, golden-crowned kinglets. A
crowned ~~tit~~, tit in one of the flocks.

The
snow birds have been seen in considerable
numbers.

On March 8 & Nov 29th 1885, I mentioned
a *Hesperomys* nest. It had been
built in the corner of a

For time running & today I found that the rest of last year was still in repair, that is now in repair.

Some interesting I collected a few fungus growths; fungus growths, one from a white oak stump having attached itself to a piece of red wood and I brought fungus & stem home together. A fungus that had grown on a sappling chestnut that had been killed by fire, had made such rapid progress that it had eaten in & included a small twig for the space of $2\frac{1}{2}$ in. This fungus is of a beautiful white & red color the sappling, making it appear as if frosted over with sugar. Besides the twig mentioned above, there are also some grasses included in the substance of the fungus.

Monday Nov 8th. There is a mouse in the house that I suppose may be called a "singing mouse". Last evening he was behind a trunk in the blue room, & when I removed the trunk he ran behind the table leaves still keeping up the singing. Later on in the evening he was under the floor in the dining room & later

he had moved to the other side
of the house. The "singing" sounds
something like the gurgling of water
^{as if there were a little stream running between the walls,}
from a broken water pipe. We
at first thought that was
familiar.

There was quite a heavy frost
last night, this morning the ice
being quite solid in the dust contain-
ing the water for the chicks.

Sunday November 12th After discussing
marshoppers for an hour or two this
morning W. Neutenmuller & I went
out to see what was abroad in
the way of "beasts". We had no sort
of success in trying to capture
water insects ^{with a net} & concluded that it was
too late in the year, as we met
with the same luck last year
about this time. A few semi-
water beetles were discovered & met
with complete approval & we fished
for beetles & water beetles by hand.

The water red hellebore, that
blossoms in May & June also has
few later flowers & we found
one today among with the numerous
flowers now under fruit.

Gnaphalium sp? was abundant.

How water beetles
to be captured

How

1886

Captain

Wednesday Nov 17th. On Monday last we caught the singing mouse, that I spoke of before, alive. It is a poor little fellow & is evidently diseased. When putting it from the top into the cage it scolded and in trying to catch it made it very noisy, when the singing ~~became~~ much louder. However on some occasions it seems to totally cease & I have put my ear to the box & have not been able to distinguish any note. But after a short time the singing commences again.

I cannot describe the sound made by this mouse very exactly, though it is, as I have said, something like that produced by a little stream of water. On some occasions it resembles the word gone spoken very rapidly in quick succession, but the mouse gives so many modulations to its note that no one word really approximates it.

I will keep the little beastie & see if he will never form his chirrup, & not his chirrup.

Notes on the Gray Squirrels. The two squirrels that
habits of I got out of a nest this spring are
Sciurus both dead now, one dying very shortly
Carolinensis after I got them, from fits, & the other
somewhat latter, from causes unknown.

I think, however, that squirrels will
not live long in captivity unless
they are provided with something
way of a nest that they can get
into. My flying squirrel has lived
in this way in a tin can for a
year & one half.

They are particularly fond of butter
which they would eat entirely off of the
bread. They eat very much of the butter.
Water-mellons also was a great favorite
though squirrels in their wild state
and have no knowledge of mellons &
this must have been a new experience
for the species. Mad Corn is not a good
food for squirrels in captivity for it
was the feature of my corn that
caused both of my squirrels to be
fits from which they died.

On some occasions smoked beef was
eaten but no other in any form.
Their method of taking things away
from each other was common.

seen one get on the others back &
so hold him down while he
pulled back at the piece of
broad or meat, & if he got it
his companion would trace him
in the same way, & as the ~~meat~~
meat would change mouths many
times before it would be entirely
eaten. There were many unequal
meets but only one squirrel was
inclined to do this part of the
work, the other relying upon getting
something away from him in the
skirmishes referred to. All the time
these little scrambling matches

attended a plaintive
cry, a sort of dissatisfied grunt.
However, their quarrels were easily ended,
for often times when one was laying
in the sun ~~down~~, the other
would come & lick him tenderly
over the head & body, as cats do one
another. When a feast was given
to them the skin was first removed
~~by the squirrel, before eating~~, sometimes
quite a large space being peeled before
the first little nibble ~~beginning~~
was eaten. The piece

then were thrown out to the left
arm for the next part about as
large as the nail on the little finger.

Squirrels ~~usually~~ have a ^{very} great knowledge
of odors, for with a tame squirrel
that I permit you to put your
head close down to his while
he is investigating any thing, the
constant sniffing of the nose is one
of the first things to be remarked.
Like rats, mice, rabbits & their

neighbors kept constantly moving to
catch the varied scents that may
give them a knowledge of the world.
My squirrel used to come to a
small round hole in the cage &
instead of putting its eye there to
see what was going on within, it
would place its nose at the opening,
showing that it relied more on the
sense of smell than vision in such
cases.

After one squirrel had died I placed
the cage one night in the chicken
house hanging it up on a wall.
I thought that the squirrels might
like to view this new habitation at a
distance so that they would appear

amusement. However at the end
of a day I found ~~my~~ ^{him} so frightened that he would not
come to the bars of the cage to see
me when I came to feed him,
so I ~~was obliged~~ ^{had to} look ~~back~~ ^{him} back
to his old quarters & he soon regained
the old time sociability.

I permitted this squirrel to
run about the garden, though always
keeping him in view. On such
occasions almost his first act was
to roll in the leaves, or sand that
abounded in the gutter of the garden
walk.

They, like other mammals, have a
number of signs & cries to indicate
their mental state & feelings. The
low grunt, a plaintive protesting sound
I have spoken of; when surprised they
vibrate the whole body, rapidly ~~vibrate~~
the tail, which is accompanied by a
~~sound~~ ^{sound} ~~like~~ ^{like} ~~the~~ ^{the} ~~sound~~ ^{sound} ~~of~~ ^{of} ~~the~~ ^{the} ~~tail~~ ^{tail} ~~being~~ ^{being} ~~vibrated~~ ^{vibrated}. On
other occasions they will rapidly vibrate
a few pairs, as I have seen ^{the squirrel} ~~the squirrel~~
do. When the cage, ^{containing my captive specimen} was approached
with something to eat in the hand, there
was also ^a pleasant kind of grunt, indication
of satisfaction or impatience. I do not think either

1886

Sunday Nov 21st. Mr. Nicolas Pike the naturalist, who is particularly interested in Herpetology, wrote to me a few days ago, stating that he was much interested in my list the reptiles found on S. I. & that he would like to walk out with me & hunt them in the winter quarters. So today, which was so warm that an over coat was unnecessary, we went wood-ward together, & found many things that we ~~were~~ were searching for, besides interchanging ideas & information.

Rana clamitans

Aceris gryllus

D. fusca

Spelerpes

D. bilineatus

We found *Rana clamitans* in its winter quarters under a stone by a spring, & *Aceris gryllus* was observed jumping about in the sun shine. I found several specimens of *Desmognathus fusca* & *Spelerpes ruber* that pleased Mr Pike, particular the former species. *Spelerpes bilineatus*, old ones & some half grown were found in the brook flowing from Logans' spring. Mr Pike says they have several broods a year. They are not very bright in color just now, nor are the stripes so well defined as those that I have captured in summer & autumn.

in the spring, however, this is a
general feature in the life history
of Batrachians, rather than a
specific one.

Colias philodice was flying - I saw
quite a number of specimens. There was
also a caddis fly about one of the springs
11 ft. - one of the boys came
home with me & we spent a pleasant
hour with the collection.

Thanksgiving day Nov 25 - I went to
Richmond today with some friends
~~but~~ but it rained so much that
it was not a very pleasant ramble.

The ~~were~~ ^{we} ~~at~~ ^{at} ~~the~~ ^{the} ~~place~~ ^{place} ~~where~~ ^{where}
and they mostly had ^{each} ~~shot~~ ^{shot} ~~a~~ ^a ~~rabbit~~ ^{rabbit} or
two & about as many gray squirrels.
We saw one live rabbit, but no squirrels
they for the most part hiding to the
test of their ability. I wonder that there
are any left at all, their existence
being the best proof of their cunning.

Two men, who have been working near
Richmond for some time, told me that
while eating lunch in a vacant house
a day or so back, they saw several
skunks come out & play about the
floor. The house is one of the ~~vacant~~

Skunks

~~more~~ with broken Dutch oven, and more
some
concord

Fungus Thielong

I found a fungus growing on a white oak,
on the top of which had fallen a number
of hickory nut shells and as the fungus
grew these were incorporated

Today the soft air was found
the house & yesterday I saw a specimen
of *Hyphema* etc.

We had a very
fine birds embracing when our total
were considered as great variety. We
ate it in the loft of a barn which
the rain pelted on the shingles without;
& Thanksgiving Day was spent in
the proper ~~group~~ by us ramblers.

Nov 17 *Agrotis saucia* found on the window
sill by a partly open sash this morning. It
had crawled in by a wash cloth that had
been hung out to air. It is very cold now.

Sunday Nov 28. Today, unlike yesterday,
was warm & pleasant, but I did not
go out until afternoon. I visited the
barn where the ^{great} numbers of bats
were last summer, but could find nothing
of them today, though I looked behind
all the beams & into all the nooks &
crannies where I thought they would

be likely to hibernate. I think this
Carolina bat is the "little brown bat" but am
not sure. As the head I brought home
was ~~indeed~~ that of an old female
with teeth much worn.

See June 5: 1886
Friday, December 3rd. Between St George
landing & the Robbins reef light I
saw a great flock of gulls this
morning, perhaps a thousand in all.
Bonaparte. These were the little Bonaparte gull,
beautifully white with dark markings.
I have never seen any thing like it
before, even on the South beach where
the common gull congregates in
numbers, I have not observed a
flock equal to this. They were,
as a flock, stretched out in a
long line, & seemed to be moving
toward Hill now there, though I
noticed many flying back along
the line at times.

I was sorry that I could not
watch them longer, & this afternoon
looked for them again, but could
not see one.

This is a very cold day

Dec 21st & 28th Bonaparte gulls were very common
here in great numbers. They were also very

1846
Snow

Sunday Dec 5th. The first big snow
for the winter and
satyed indoors. It snowed about all
day & I do not know when it commenced
in the morning.

Tuesday Dec 7th. It snowed again last
night & is snowing now, having commenced
about 10 o'clock, so that we have a fine
covering for flour & meat.

Wednesday Dec 12th. I went out for
a walk today though it rained
slightly when I started. There have
been some garbage dumps near
one of the roads on the edge of the
wood, and the crows resort to the
locality finding considerable to eat.

It rained quite fast; I got up
into a cedar tree on the borders
of a swamp near Pilot Lake, and
watched the birds. There were a
pair of Cardinals, birds hopping about
in the thick growth & sometimes
flying ~~about~~ up into the higher
trees. The female lit in a
tree within five yards of the
cedar where I was, & I had
a very good view of her. The
color of the bird is beautiful.

1886

in the same birds. There
 were as usual a number of
 chickadees & yellow birds, and I
 observed that the latter were very
 fond of the seeds of the black
 birch. Many of the birds were
 in one of these trees, & the seeds
 that they let fall, fell to the
 ground on the white covering of snow.

Yellow birds
 & black birds

Woods

Sunday Dec 19. Today was very warm
 for the winter, the steam coming
 off of the fences in clouds.
 In one place where there was a
 high board fence & the sun shone
 brightly on it, the clouds of vapour
 extended half way across the road.
 But it got cold & foggy later on,
 & it was a pleasure to see
 the sun after all.

Spelerpes
 vils habit

A Spelerpes ruber that saw me
 shading over a spring, commenced
 to dig in the mud at the
 bottom, but ostrich like, when its
 head & shoulders were covered it
 thought its tail was out of sight
 also. However, I poked it out &
 found it to be about $\frac{2}{3}$ inches long.

& quite dark, but - then they are not so brightly colored in winter as in Spring & Summer.

Caddis fly

I captured a Caddis fly, the same species that I took on Nov 21st.

I also watched a rabbit for some time as it meandered about - through the thick growth of bushes on the hill side back of Britton's pond, the white covering of snow showing its gray body to advantage. It hopped off after a time & I did not follow it.

Hibernating bat

Wednesday Dec. 22nd. Yesterday, a friend

This was a

brought me what I take to be a Carolina bat, that had been found in a cellar under a stable - When brought into a warm room it revived, though it showed no inclination to fly about.

I noticed several days ago a number of shrews sitting on the trees in Britton's Park with their heads under their wings, as if they were sleepy, & had been out late the night - Today, I saw another; so it appears to be

1892
a common attitude. I do not think
they did it to keep warm, as today was
cloudy & not cold and as I remember,
the other occasion was similar.

Christmas Day. I went on a long
walk today, about thirteen miles, for
it was so cold that sitting still
was not comfortable. However, in the
middle of the day I found the
warm side of an old house, where
the sun shone bright & a few flies
myself enjoyed intimately the
hospitality offered by a soft pine
board. I did not like to leave
my chosen spot, & would have
enjoyed to remain with the flies in the
sun; but the Christmas sun is no
kinder than that of other days, ^{it will not tarry} &
so I wandered away through the
old lilac bushes & broken grape arbor,
to the woods across the road.

About two or three o'clock in the afternoon
I came out on Garrison's road
near New Springville, & after that following
the highway home, seeing a great number
of hawks & finding a few crows
in all my ramble..

Uta stansburiana Gm.

Observing that the lips in some individuals of Crotalus stansburiana is scarlet, while in others it is reddish-brown, and respecting former observations that it is more often scarlet in the males than in the other sex; I have taken to record the color of the lips in the land turtles met with.

St. Island

July 15 th 1881	Full grown specimen	♂	bright scarlet) Please examine carefully at the front
" " "	" "	♂	scarlet	
" " "	" "	♀	reddish brown	
" " "	" "	♀	"	
" " "	" "	♀?	"	
Aug 1 st 1881	"	♀	reddish brown)
Sept 11 th 1881	"	♂	"	
Oct 1 st 1881	"	♀	dark gray	
Nov 1 st 1881	"	♂	")
Dec 1 st 1881	"	♂	scarlet	

Notes on Singing Mouse

See Nov 8th & Nov 17th 1886.

Nov. 17th Mouse singing incessantly, even when eating & gnawing on the exposed wood in the cage.

Nov 18th Mouse only sang a little this evening & I could not get it to sing even by poking with a stick & exciting in other ways.

Nov 19th Singing this morning.

Nov 26th Yesterday mouse had two sons but I was not perfectly sure until this evening when I looked. I heard the squeak several times yesterday & now they are as noisy as babies usually are.

Dec 12th. Looked again today at the young mice. They have grown greatly and are covered with short hair. Mother sang when I disturbed the bed, but in her state of weariness shortly.

One of the little mice looked out of the nest when the mother mouse became much excited & kept up a constant singing. These baby mice are funny little things, speak and act with the same air of respectable juveniles.

all its companions in the same cage and
in the same water. The mouse eaten was the
most-backward one of the two. I
found the lively fellow at the other
end of the cage. For safety I
removed the other mouse to separate
box. She sang all the while, ex-
actly at the time she creaked in the bath-
room & was pursued. Remarking
young one can eat cracker & run about
very lively now, though apparently
it was day. Baby mouse not done
well away from its mother I put it
back after it had been separated
a day. I observed it today arranging
the other wire - the door of its nest

I have examined the nose of
the singing mouse & it appears
to me, after close inspection, that
the singing noise is produced
in the nostrils & not in the
throat. There is, I think, a little
worthwhile but it is not necessary
to compare with the other
before being made known.

When you are confident I am not so sure that the mouse
presents from the nostrils, though it may be so.

Natural History Notes &c.

- 1887 -

Wm. C. Cress
Poughkeepsie
N.Y.

Note. In the notes the words are collected in the same
manner as in the case of the small birds.

Wm. C. Cress

Sunday Jan 15th. All the days that I might
have gone to the woods this year have been
extremely cold & today it is snowing fast.
However I saw Cardinals and on the
hill this morning pulling seeds out of a
tree, yesterday there were none.

Shells

in the time that those of ducks
with the 'reeds' place wings extended
the 'singers' and others were numerous.
The 'singers' were stuck in the
water, the spray was splashed quite high in
the air. I saw in the bird in the
tree before. It was at that time there were
two seals seen in the morning.

new sparrows
in the

Saturday Jan 16th. Several mornings ago I
got up about five o'clock & going out
on the piazza I noticed an English
sparrow in the chimney as that looked
as if it had been there all night &
was still but half dead. The next
night I went out about 9 o'clock
& shook the honeysuckle & two sparrows
flew out, so I found that they occupied
this cold place instead of hiding away
in the sheltered nooks of the house.
Sometimes when I go down to the river
house in the morning, I find

1887

little sparrow sitting on the roost by
the side of a maturely hen, such
the contrast of size & action in
the singing.

Sunday Jan 16. This was a pleasant
morning with the wind from the South-
west - as fine a day as could be expected
in winter here. I went to South beach
& walked nearly to the light house;
then across fields to the R.R. & along the
track to Clifton.

Near the Fort (in the grounds) I saw a great
many robins, the first ones that have
greeted me in 1887. There is a very well
kept side road with young trees & bushes,
& also an open road in front, permitting
the sun to beat down its mildest rays,
and here the birds love to congregate. I
have seen many birds here in early
spring, & it was also near this spot
not many years ago, that I witnessed a long
singing match between two song sparrows.
I saw but one song sparrow today & he did
not sing.

Thousands of sand crabs & an equal number
of old ones, had been cast upon the
beach, some of the latter being decked out
gayly with periwinkles, which had grown fast

See page after next

Jan 20th. A. Lind tells me that
while driving up Sand Run, New Brighton
several nights ago he saw two screech
owls flying after each other from tree
to tree. One or two warm nights
of late, I suppose have tempted
"them out".

On one of the coldest nights lately
I shot the honeycreeper on the corner
of the piazza & after shooting several
times, one sparrow flew out.
So they sleep in this cold place
windy nights as well as calm winter
nights. I intend putting out a lantern
next time - a bull's eye - and see
how they manage themselves.

to the sea & has mud for distance
out on the sand

The other crabs found were Panopeus
depressus (one), Platyoniscus ocellatus (several) and
one poor little edible crab, the smallest that
I have ever seen, which I brought home alive.
I forgot to mention Hippa talpatoria, which was
numerous but all the individuals were
small, & did not see even a leg of a
decorator crab though I looked a little
in some of their remains.

In the spring near the creek, a man-
has built a little house, cannot it
be with old tin, & in this he lives
permanently. I think he had some rollers
stay so I did not call on him, but
intend to come later time. Before
the brokerman told me that he was
a queer fellow, & that he came from
some Pt. Lost Face & built his house.
He is now living in a boat also.

Butch also told me that he often catches
new turtles in the Spring & Fall, & that
he has sometimes found dead salt water
turtles on the beach. I told him that
I had found a little one alive ~~once~~, and
he said, & in answer, I told him
that I had a turtle. Butch is a great man in

no way, & is my kind of reading. He
tattooed three papers including the National
Tribune, which he says is published in
Washington, & gives him all the points
as to what covers it is. "I give
one dollar a year for it, & wouldn't be
without it for five", so says Burke -
"for it contains a history all about the
war, and that is good."

Urea ~~transversa~~ was more plentiful than
I have ever ^{and with the grass,}
In the ice back from the beach, I
found a great number of small spiders,
with 2 dorsal black stripes & one on each
side, of the same color. I brought three home
& have them now in a bottle.

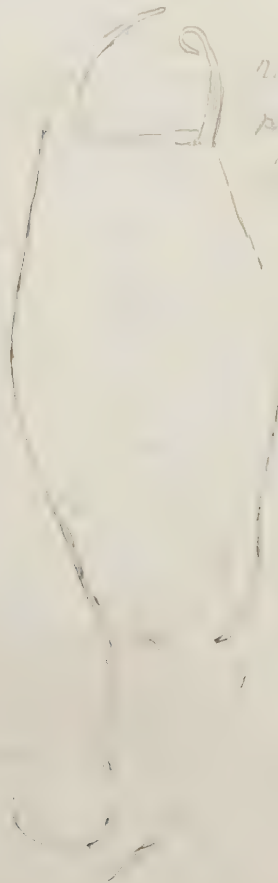
Among the oysters, back from the beach,
a great number of holly trees grow.

~~the~~
~~usual grass~~
~~back from the beach~~

One of the old oysters that
I measured was 5 1/2 x 10 in round

On the R R track I counted about
eight or ten caterpillars of *Pyrrharctia*
isabella, some of which were dead, but
two live ones, I brought home.

Grand mother tells me that in 19 years, the birds were used to fly over towards Sandy Hook, where it was said ~~that~~ they had a roost. This of course was in winter time, & she says that for an hour about sun down, they could be seen flying in long lines towards the point mentioned, but she never saw them return, in the morning, where probably the place before it was



Natural size of egg case of
-H- ray: found on South Beach
Jan 16th 1887. This is the
largest specimen I have
ever found, or indeed have
seen.

Sunday Jan 23rd 1887. This has been a
great day for blue birds, cedar birds
cardinal birds, indeed - all the birds,
for me who

TRIPUNE OFFICE, Jan 23 1 A.M. A wave of excep-
tional warmth for January rolled from the West coast to
the Atlantic seaboard yesterday, attended by a windstorm
which moved from the Southwest over the Lower Ohio
Valley to the Lower Lakes. A cold front set in on the
Northern Minnesota frontier. In Iowa the bar descended
sharply, with partly cloudy skies and a sprinkle of rain.
The temperature dropped somewhat, and by the eve-
ning of 17° below zero, the coldest yet in the winter
day last year, and 14° below zero on Saturday.

to see them. I left my
home it was so warm,
& the country was running under in
one direction as the ice & snow melted
on the hill sides.
I saw several flocks of cedar birds, & they
always turned all their heads in the
same direction when they lit on a
limb. Whether it happened so or not, I do
not know, but ~~the birds~~ their heads
always turned toward the sun. It will
need further observation to make sure
of this. (Very likely the wind - was from the west)
A ~~very~~ ^{small} moth was captured & I saw
a second - one, which I failed to get.
A ^{small} ~~large~~ ~~insect~~ ~~in the~~ ~~captured~~
~~section~~ was running itself on a chip of
wood, & I inspected it for a long time
with the magnifying glass. queer little
beast, clad in mottled armor, looking
for all the world as if moss was growing
on its back & sides.

There is a bitter-sweet vine near Silver
Lake, that grows upon a cedar tree and

the birds

FOR SOME YEARS
BUSINESS EDUCATION
has been the leading department
of the business colleges of the country
OF SOME
free, practical
school instruction
HOW
to
the
day

Sunday Jan 22nd 1887. This has been a
great day for blue birds, cedar birds
Cardinal birds, indeed all the birds,
as well as for me who
went out to see them. I left my
overcoat at home it was so warm,
& the country was running under in
a direction as the ice & snow melted
on the hill sides.

I saw several flocks of cedar birds, & they
always turned all their heads in the
same direction when they lit on a
tree. Whether it happened so or not, I do
not know but ~~their~~ ^{the} heads
turned inward toward the sun. It will
need further observation to make sur-
e of this. (Very likely the wind was from the west
at the time) The north was captured & I saw
one and one bird I failed to get.
A ^{small} ~~bird~~ ^{bird} was running itself on a chip, or
wood, & I inspected it for a long time
with the magnifying glass. Fine little
beak, clad in mottled armor, looking
for all the world as if moss was growing
on its back & sides.

Bitter sweet

There is a bitter-sweet vine near Silver
Lake, that grows upon a cedar tree

thirty feet high, and a very pretty little one
near it is - At the base it is about an
inch (that is each stalk is, or there are two)
in diameter, & they wind about the tree
spreading out at its top into a crown
of bright coral berries.

Male specimen
Palomares

On a road back of the station
I found a dead specimen of
the same as the Palomares specimen,
found in the same place. It was
a small tree about 10 feet high, with
a few leaves in the buds. It was
the same kind of wood as the
one found in the Palomares.

The tree made some flowers on the
ends of the branches, and was very
common in the place. It was a long time
before I found it.

I found a small tree of the same
kind in the place. It was a long time
before I found it. It was a long time
before I found it.

I found a small tree of the same
kind in the place. It was a long time
before I found it. It was a long time
before I found it. It was a long time
before I found it.

1887

Sunday Jan 30th. This is a foggy day,

about
 singing & curren

I cleaned mouse's cage this morning,
 & they (mother & child) run around
 the bath room while I was at it.

The old one got in the register, which
 was shut, & after I had jolted her
 out, & she had run about the room
 a little, she commenced to sing, and
 is still in tune. The young mouse
 is not quite full grown yet, and is
 very light in color.

Artesian wells

during spring's dry.

I went out this afternoon to Elm valley, it
 continued foggy. Part of the time a light
 rain fell. The Crystal Water Co. have
 sunk several artesian wells in a part of
 the valley along the course of a brook & now
 have a good flow of water. In Mrs. LaBau's
 place, on the hill side, were two overflowing
 springs, which have dried up since the
 water company commenced operations. These
 springs were eight or nine hundred feet
 away from the artesian wells.

Cardinal birds

Cardinal birds have been very plentiful this year
 more so than ^{from} ever heard of, or seen before. It
 may be owing to the very cold months of
 December which drove them to the coast &
 they have stayed.

I found a clump of bracken *Equisetum*, which is not common in the Island now & the moss was. From what little grass here has been pulled up for the nest part, to decorated the house with at Christmas time & the ash barrel for weeks afterwards.

The mouse nest spoken of on Nov 7th & previous dates, was found deserted today & in bad condition. There has been some wood chopping going on in the vicinity, a cedar tree falling in the lot near where the nest was. A great deal of bark has been pulled off of the cedars in the neighborhood, but I could find no nests in the bushes though indications of hollow trees were plentiful.

Sunday Feb 6th. Today was much colder than Sunday, but much colder. It did not thaw until ^{late} afternoon. While walking along a wood road, near Ocean Terrace, I saw a field mouse run, & upon scratching away some of the ice & snow I saw under a large stone. This I turned over & found an underground gallery, with a few empty acorn shells in it. The mouse ran out and ~~under~~ under a piece of ice lying near, & this I now turned also, & found a

Ammodramus
reparans

nest - made of grass, in which the mouse had taken refuge. I captured the little beast (*Arvicola riparius*), and after examining it a while - its very short tail, little ears &c. - let it go. I also fixed up the nest as well as I could, so that when it returned, it would look as near home-like as circumstances permitted -

Thursday Jan. 10th - Aunt Frank, who has been in the lock out for a some shamed notes was she heard a bird singing, in the hedge across the street, yesterday. Last year I heard a Song Sparrow before January was out.

The past few days have made quite a march toward Spring, today (what I said of it) being

The singing mouse, that I have made several previous notes upon, still gives forth its doleful ditty, particularly when it has been gnawing on the cage, which it does too often to please me. I have stuck several pins through the edge of the box, but I think I will have to impair its house, otherwise Mus will soon be at large again. The mother mouse does not keep shut of sight nearly as much as mouse the young. Last night I held a flaming piece of paper up to the glass for her inspection, and she did not "strip".

Poughkeepsie Staten Island
June 7th 1887

See Snodgrass letter
June 17th 1887

Mr Sumner H. Snodgrass;

Dear Sir;

I had S. collar marked
S. aequata but I think I saw more like
the latter species. I saw the difference
occurred in the pronotal crest - but did not
draw of the western collar being more to
! . . . It will show how in my philosophy is

(OK) No 1

S. bullata?

(OK) No 2

Conocrobia robusta? Occurs in the grass
near the Salt water (Orin's & Ward's Pts.);
also very common in Green Island. Stridulation
can be heard. I saw one of it so loud is the sound
produced. I have also taken two specimens in
our garden, about a mile from sea shore, and
a few near some very black grass mat which
it is most of its life.

(OK) No 3

I took several of these insects in a salt-marsh
among the C. maritima that grow in such places.
The one I brought was S. stridulation is very
loud - louder than the one made by Gryllus
abundant, and I was much surprised to
hear such a "sing" come from so low
an insect. It took me an hour, the afternoon
collected these insects to capture four species

Trumbullville Station N

Jan. 27: 1889

Mr. Samuel H. Scudder;

Dear Sir;

Your letter of Jan.

17th received & I was very much pleased to find that the *Cercopneustes* was a new species. If you can spare time from the butterflies, will you not be good enough to describe it? it would not take long.

I wish to make a preliminary list of the Orthoptera of S. I. as another step to working up our native fauna.

I send the species of grasshopper that Mr. Bremer identified for me as "*Paroxya floridanus*, Thos."

It is common & in swampy places.

Very Truly,

W. P. Davis

Mr. Samuel H. Scudder, Feb. 6. 1889.
Dear Sir:
The packet received
and I am very glad to receive it.
Your description of the grasshopper
I will make an effort next
week to explain some additional
specimens & if successful will
be very happy to send more
a goodly share. I send Mr.
Bremer a *Cercopneustes* a
year ago now closely allied
to *eugetes* than the former
species. He thought it might
be *eugetes* but was not
sure. He substituted it in my
list. He still has the specimen.
The last decade I have to that
in April 1878 I was in to that
I find me *Cercopneustes*
I received from him in 1878.
Feb. 1878. W. P. Davis

See answer to letter in
same book. W. P. Davis

Trumbullsville Station Mo.

Jan. 27: 1887

Mr Samuel H. Scudder;

Dear Sir;

Your letter of 1st Jan.

17th received & I was very much pleased to find that the *Cenocephalus* was a new species. If you can spare time from the butterfly, will you not be good enough to describe it-?; it would not take long.

We wish to make a preliminary list of the Orthoptera of S. I. as another step to working up our native fauna.

I send the species of grasshopper that Mr Bruner identified for me as "*Paronyx floridanus*, Thos."

It is common & in swampy places.

Very truly

W. T. Davis

Dear Sir
I would instead have not
told you of it & send name as
usually was from Blair Wood, and
I am sure it is *Cenocephalus* & *Paronyx*
the new grasshopper - name signifying the
"wingless head".

But I will to ask you, will you permit me
in the note accompanying the description
of "Paronyx" was sent to Mr Scudder
it is evident it is a new species &?
this will be the last letter I will
write you with, at least for a year, as I
shall have already infringed too
much on your time.

Very truly
W. T. Davis

We insure to letters in
series book "Cenocephalus"

Birds

at last

Crows

Sunday, Feb 13. A bright cold day.
A number of birds abroad - yellow birds,
Kinglets, snow birds, white bellied nuthatches,
chickadees & several kinds of sparrows. Nuthatches
an impatient birds, I watched one for
a long time carefully searching a tree
for insects, & twenty five or thirty minutes
afterward it had only got to an adjoining
tree in its protracted search for a living.

One crow flew after another fortunate
individual ^{also named} carrying something in its
mouth & the ~~other~~ ^{other} crow cawed
loudly as if to make its companion
stop, flying away so fast and soon
it came side by side. However it didn't
stop, & by & by fell in the long
grass of a swampy place in the
meadow when it was not followed
by the other crow. I watched it
moving along for a good while but
could not tell what it was doing;
perhaps it hid the clank morsel
in the long grass.

I got up a tall cedar - to look
in a large squirrel nest made of
cedar bark but my hands became
so very cold that I could hardly climb.
There wasn't any thing in the nest, neither

could I discoverⁱⁿ which direction the

mouse's nest.

I also looked in the mouse's nest - discovered last Sunday, under the fence rail, but the mouse wasn't in.

Cotton plants

much by lightning

Friday, June 1. There was a severe thunder & lightning storm about 8 o'clock this evening, some of the flashes being very vivid. One of the particularly vivid flashes of light did much damage setting fire to the cotton plants (Am. docks) within a quarter of a mile of the house and all night long the flames lit up my bed room. Great sparks fell down at a long distance from the fire & tongues of flame with small cones stretched far out from the stems themselves, blown by a strong south wind. The stem^{stems} had a flag-staff on it & was quite high itself, and it was perhaps in this way that the lightning was attracted, finding the wet rope a good conductor.

Blue birds

There have been some fine warm days of late & blue birds in the garden, but I have not heard a song sparrow.

Song sparrow

1877.
Early specimens
very.

Monday January 20. I did hear a song
sparrow in town though it was so dark
& gloomy, snowing fast at the afternoon,
though it melted as fast as it fell. This
was first sparrow song of the season, for though the
past Sundays have been as cold & dark
as today was.

I went to El Glen & walked up the R.R.
track to the second bridge (Fingerboard Road),
& then across through the woods, turning
over stones for beetles & examining insects generally.
The cranes are now holding their regular
spring meetings, when they make so much
noise and I came upon a party of them
near low ravine. One of their number
sitting on a tree regularly attends them
can do at a time with only one exception. I
suppose that that must be all now, well,
for they did not fly away until he
cawed rapidly when they took flight in
a body rising over the valley where I had
not been able to see their great number.
So I saw a party of them for which I
was ^{very} glad the black swan
cranes, & like it attend their meetings.

Later on
some

At White Oak, that I found cut
showed about 178 annual rings, and
also two points where these rings

Though not strictly proper, perhaps I might say the tree had two centers. This was probably owing to its having been forked near the ground when a sapling, the two branches growing together about the 15 year, so that ~~today~~ no one would have guessed there were looking at the exterior, that tree was two in one.

Measured 17 ft
6 in around

I also found a big chestnut tree 17 ft 6 in around which is the second tree in size that I know of on S. I. It is hollow.

The big tree
(chestnut)

Crossing the R. R. track & the Richmond Road, I went to look for "the big tree" which I found with its main branch cut off, & lying on the ground near the trunk. It will probably be entirely destroyed in a few weeks. I counted the rings very carefully, sometimes using my glass, so as to make no error. For the first 70 years the growth was quite rapid, when suddenly it stopped,

Annual rings of
main trunk

& the next 71 rings were separated with difficulty. The only cause for this, that I can think of, is perhaps that in that year one of the other branches received a large supply of the sap, & the branch examined did not grow so fast after that. I found some old ^{be} comb in the hollow branch on the ground, & also a great deal of squirrels' nesting material,

nests - but two are not uncommon & I
found a second one during the day.

Thursday Feb 27 - I discovered
a mouse's nest, & in a sassafras
tree a flying squirrel that I could
only make stick its head out of a
very small hole. Finally it would not
do that, though I pounded diligently
at the trunk of the tree with a large
stick. I was very glad to see that the
squirrel had such good work.

Sunday Feb 27 - This has been a very
miserable day, for me. It snowed -
yesterday melted & so that
the roads are very bad and one walks
as a drunken man. I tramped
about seven or eight miles out from
home, but because after I was got-
started there was no alternative but to
go on. The air is so stormy
that an English Sparrow flying up
by the roadside, came against my right
boot with considerable force. A
little while ago I saw a
was the prettiest thing I saw in
my walk.

We should not let our minds be

In the morning, Berkeley, N.Y. There
is a large collection of beetles but the
most fine ones, that came on
board the ship Hatteras while in
the straits of Florida during the
volcanic eruption of May 1885. In Vol 1-40
of the Burr Cross there is a note on the
Effect of an Earthquake on Insects - "On
the night of Aug 31, 1886, when the first tem-
was felt by members of our family, the
music of hundreds of Halydids, orickels,
and other insects among the pines, sud-
ceased, and did not begin again until
after the shocks - which continued about
hours - had ceased." &c.

Perhaps in the first case also, the
volcanic eruption had nothing to do
with the appearance of the insects,
which often come on ship-board.
Sunday March 6th. It rained last
night & is raining now, so there is no
going out today.

Monday March 7th. Under a shelter
that rats nest (in the sand) I found twelve
young rats this morning, apparently the
offspring of ^{as there were 12 together} one individual. They seemed
to be but a few days old, having no
hair on their bodies, & with eyes closed.

White maple - Wednesday, March 7. The white maple is in flower
that is the early trees are for there is a
great difference in this respect.

Willows appear to be very pleasant trees
to have about a house so green in winter
and so sure to live. I think of a house
where the has planted some little trees
of this kind, close up to the window, and
the view is a kind of winter garden.
The winter garden is a very pleasant thing
the winter garden is the best of all &
the catkins come.

I think it better to say the other
way "I must go to the every
where but in our house" because she
thought that all other places were preferable
to have more beautiful location.
Many older people make themselves unhappy
by thinking the same thing, though they
may be sensible to some slight faults
in their philosophy, discontent, though
so natural to many of us, perhaps no
one being wholly free, is the cause
of many needlessly painful hours of the times,
and neither riches nor poverty can help
up and act as a kind physician.

about their 11 or 12 years respectively grow from
thence inward as one tree, forming 11
^{additional} annual rings. The centers of these
^{about 3 1/2 to 4 in. in diam. and} saplings were braced through out the log
for a distance of 22 ft., where they fast-
^{one} ening a large stick and the other
continues as the main tree.

Singing mouse

See note 2107

Feb 11 I let the mouse out in the bath-
room this evening, but it did not sing.
It appears to have got entirely over its
disease. The last time I heard it sing
faintly, being about two weeks ago. The
mother & little mouse clung upon the
broom hanging on the bathroom door,
and some time I caught one in my
hand for they are somewhat tame.
The little fellow is small & quite light
in color, and also appears to be well,
as he had some difficulty in getting
on the broom when his mother climbed
with ease.

Flying squirrel

I must take this occasion to say how very
tame & pleasing my little flying squirrel
is. I scratch its head & when I go away
from the cage call to it; it will
often utter a faint cry, and when
I come to the cage again it acts
so pleased & has its head once more on its
side to be rubbed.

1881

Sunday, March 20. I went to Prince's Bay today & walked along between the R.R. tracks and the shore to Giffords.

There was one very large flock of red-winged blackbirds, mostly males I think, but I could not see them all. Along some of the fence. There are near the shore the crows have dropped thousands of soft-shelled clam shells, and there are also many quite a way inland, as I have before noted.

Some time ago I noted a flock of cedar birds all headed the same way when they lit in a tree, and today I saw a large number of yellow birds light on the telegraph wires, and all their heads pointed in the same direction.

In a hollow apple tree I discovered screech owl, being ~~one~~ of the red variety. It kicked violently when I lifted it up, & made the same snapping noise that they do when flying past your head on summer evenings, or indeed on winter evenings, if you happen to be afield. If I laid it on its back or side up against the tree, it would stay in the very same position that I found it in, though it probably could see quite well for the

light or not strong in the candle: - before
the day was done.

Skunk

Chipmunk

I found a dead skunk, with stripes of
white along its sides, and about $\frac{3}{4}$ grown.
I also saw my first chipmunk of the
season running along a rail fence.

Burying ground

I visited the small burying ground, belonging
to the Port of Newport - where all the sailors
dying of contagious diseases are interred.
There is a small foundation where a house
stood long ago, & some stones have ^{been} run out
the stones, & stones grow up in the cellar.
The grounds are quite covered with a thick
growth of small trees & shrubs, so that one
can hardly go through. When the bodies are
buried, a board with a number ^{and name} is placed
at the head of the grave but most of these
boards have fallen down & lie all over
the grounds. I saw one place, in the
cellar of the old house where the grave
diggers, I suppose, had placed them on small
small stones, thus making a seat where
they could eat dinner.

There is a private burying ground in
a little wood, not far from the last-
mentioned, but further up from the
shore where there are several quite old
stones. I copied the following inscription

The ... of this ...
Mr Matthias Johnson, who departed this life
Sept^r 16th 1751 in y^e. 57 year of her age.

Her ...
& Cartwright-Johnson, died Mch^r 16 1734
aged 2 years 7 months & 19 days".

"In Memory, Augustus Dubois, the son of
Sept^r 14th 1807, aged 54 years & 5 months
Our children at this time appears

Prepare for death ...
Ah, go you home for us don't weep
Beneath this mouldering sod we sleep
You'll be embowed as well as we."

The ... of ... daughter
of Augustus Dubois who departed this life
Mch 31 1815 aged 58 years 5 months
Prepare for death and follow me."

Henry Parker, died 1815 aged 60 -
To, Anna, wife of Wm Lakerman, died 1846
aged 60 1/2 -
To, Rebecca Gunnin, died Oct-12 1820, aged
28 years
To, John Butts, died Oct-25 1821, aged
To, Wallace Bates Green, died Nov 12 1823, aged
3 years, 1 m. & 18 days -

I neglected to note what month it
was, when Rebecca Parker died, but it
be observed that all the others either died
in the spring or fall.

See Copy
of this Cert.
made NOV
11-1888

Halting, sweet warms, how I wonder that
people let them lie about their sides, or
in the little valleys, when they are all
gone! In the old La Forge place there are
several trees, & I always set me down on
the slope & count a number before I can
go on. The old house, the old trees, the
big box plants by the door, & the crane
in the chimney - all in keeping and just
the place to me. I have not
cracked them these years ago. I like to look
down the old well, with its form, and
stand on the old, the old

built their nest last summer. Perhaps the
the turkey & the ...
Today. It is certainly a noble gobbler & perhaps he
was a noble man, but nature had ~~made~~
never decided him so gaily as his gobbler.
Great folds of skin of red, blue & pink blended
in a marvelous way. with flashing dark
eyes. The pendant from the bill reaching the
breast equally gorgeous & then the very fine
feathers. Indeed the turkey is a fashionable
bird & it is to walk as the ...
with those who walk for show.

Monday March 21. I saw two nests flying
this evening, one in a lecture room & one as
I came out of the door. Owing to the situation
I was unable to capture them, but think
it was Lithophane unimoda, at least the one
in the room looked like that species.

I stated on Feb. 15 that the singing
was ... that I thought it was entirely
all of the ... it was
quite beautiful.

Friday March 22. It was our coldest today,
being cloudy most of the morning, with
sun shine at ...

I wandered about through the ...

for us Blood-not valley, & then came home along
the road.

Moth.
I found a geometrid moth on a stick, evidently
just hatched from ^{the} pupa. I do not resemble
the Arisspteryx I took in Mich. - several
others up.

Most of the above was from birds so that
I could not easily have been over, but
and ^{to} see that I over turned & found
some gray species of Platodon erythronotus.

I saw many birds & with my glass
could see the movements closely. The
birds were very numerous, and on
a hill-top, and every time the

low the wind picked up the birds
were flying in the air. I could
not see that there were trunks of
fallen. I saw a white hawk & two crows
occupying the position, to those close by
the the last of the year. I saw
the first of the year.

I went to the edge of a field, and
crow flew up out of a field close by me
& lit on a tree. I walked up to him
but he did not fly away, and so think
he was a tame bird; I went away to ask
a boy over by a barn about him. He said
he had never seen the crow before, & was

Some natural
history notes found
at furmen's bay

that it must be injured or sick. This
young fellow also told me that he had
seen a racoon some years ago, & he thought
that there were some left yet, as he attained
various noises he heard at night - one in
the woods, to crows, &c. had never heard
of foxes or opossums being found on the
Island.

Small birds

Protestant lil

The male snow birds are singing now. I
saw one of the largest flocks that I ever
saw to mind. The crested titmouse, with
its chee, chee, chee generally repeated
three times in quick succession.

Shunk

I found a P. p. phoeniceus cocoon and
discovered a shrub's ^{at the roots} above a hollow in
the wing one of the hollow roots in an extreme
little now, when the little little.

I climbed up in a sweet gum tree by a pool
in a thick cedar woods, & then after
after which I had a sort of nap. It would
be no difficult matter, with a rubber coat
and a piece of rope, to pass a night
very comfortably in a tree, as several times
I have spent a really restful hour in
some wide spreading branches so formed as to
safely hold me.

Snow

Friday April 12. It has been quite cold lately since this season of the year, indeed the past winter has not been mild, though probably not what would be called a very ~~ann~~ one. This morning the ground is covered with several inches of snow, and it is being steadily added to. 7 a.m. Thoreau speaks of the ice breaking up in Walden pond & the table that he gives shows that it was always later on the springs of the years ending with an even number such as 1887 &c. The snow, does not make the observation so well stated.

Snow

Sunday, April 30. The summer season of the day Saturday, ^{as well as on Friday,} so that the ground was around this morning, but it disappeared under the warm sunshine that made today so pleasant. I walked out nearly to the poor house farm, rambling all day with my foot.

Butterflies

I saw the specimens of V. antiope & one of the Lycaena the first butterfly that I saw in this spring. There was also quite a large number of Lycaena about, but I was unable to capture any of them.

Thoreau

Chrysomelids were seen in great numbers on a rotten branch lying in a meadow.

Good Friday April 8th. I have noted on birds
of this that I fed hardly all to go out
today & I did not so much. I have found
a couple of eggs, I had thought none.

Hum. all as well this morn.

I spent most of the day sowing a heap
of dead branches & leaves in a glade under
the full force of the sun. ^{nothing}
me, & soon I did not see any more
more all day.

On the beating
of spiders.

A number of spiders were running about,
when they came to a dead leaf - ~~and~~
the proper position, they ^{stop} -
their palpi rapidly against it, producing
quite a noise thereby. I could not see
that they attracted one another though I
suspect they were all males that produced
the noise, in which case they would
naturally keep at a distance. Numbers of
"bee flies" were about & some of the
moths - *Trinidad*

Today

The most valuable insect seen & taken was
Brephos infans. Numbers of these were flying
about, but they were hard to approach for
the most part when settled on the wood
path, & when disturbed they flew over
the thick growths of cal trees, ferns &c. &
often lit on the branches of trees.

In the morning the sun broke late, & shined
by the old place in the road path. & it
as the sun grew warmer they flew higher,
& I saw no more specimens walking over
the damp leaves opening & shutting their
wings after the manner of P. alataula.
My ^{insect} net was only six inches in diameter,
as I expected to see but little blue butterfly,
& so I had hard work to capture the
three specimens of this insect that I
brought home. I stood at
of a small section of the path where the
woods gave place to bushes on either side,
& where Buprestes flew into the path &
ran after it, endeavoring to take it on

Cal

The catkins of the alders, growing along
Old Place creek, are now giving forth
pollen, & some of the willow

In a pool, I found a number of
wood frogs & toads, and there as
a number of eggs attached to the grass stems.
They must have belonged to a species
which I have never seen before. I only noticed
small reptiles, and the

Saturday April 9. The great many nests were flying about a few maple trees some of which had had some of their branches cut off, from which the sap was flowing. I ^{in house} ^{and} got a clearance from home. I would have captured a specimen or two for identification.

Flying squirrel I find that "be" the flying squirrel, is fond of dried beef, I gave her some today, which was greedily devoured.
Sunday April 10. I went to Richmond Valley Station to see with Chas. Long.

Cardinal birds
Field larks
Hermit thrush

Cardinal birds & field larks were singing & the thrushes were numerous.

It is a fact that

Cicindela

Cicindela modesta flying in some numbers. we captured C. longebarica & C. generosa, a specimen of each species. Long thinks that Cicindela & other beetles, often crawl in northern

Cychnus

stumps &c to die. Today I found Orthosoma brownianum sucked away in a white oak stump, the beetle being dead. Cychnus bicolor is to be taken in these sandy districts, where Kalnia grows so plentiful as to give quite a green character to the country.

V. antopa

V. antopa was the only butterfly seen. Rubus roseus is in flower, some of the plants also

Apr 15. To Kopton in morn. the last of winter
Apr 15. To Kopton in morn.

Walking in the morning and found I
was not alone. I saw a dead house.
The house was surrounded by a number
of trees. I got into view of the
dog before he saw me, & when I noticed
that he had observed me I stood
perfectly still. I have rarely seen
a dog so much surprised. He barely
moved, his breathing was heavy &
labored. Finally he got his wits together,
as well as his legs & scampered off, with
a

Sunday, April 17. ¹⁸⁸⁷ I went to the
station to look for an owl. I spoke of
on Mich 20th. She was in the tree all
safe, and also a headless sparrow, which
had formed part of the last feast.
Very sleepy indeed was the owl, so that
I laid her up out of the way, while
I looked for eggs, but there were
none. Coming home on the train I met
Arthur Hollick whom I had told all about
the owl & where to find the tree, & he
informed me that he had visited
it on Thursday & found two eggs,

Meadow Larks are plentiful.

Red shouldered hawks that were
built near Ellingville were flying
in the air.

In a somewhat wet field I found
quite a number ^{of the} meadow mouse
the occupant of an ~~running~~ out as
I turned. They were for the
most part built under a lot of
cut grass stems &c, lying here & there
over the field & I have never before
seen so many.

The day was cold so I did not see
many in the flying but on a willow
I did see

Thurs
By a little pool on the borders of
the salt meadow below Giffords, I stood
for a long time watching two muskrats.
They would get out of the water on the
banks & shake their selves as dogs do, & then
they would fall to eating the grass. One
strayed quite away from the main pool
along a winding ditch, and as he
came back following each curve, instead
of being that out, he had turned
back. With my glass I could
see them all & watch every movement
when they were afraid, & when they
thought no danger was near. Sometimes

I would start my foot against the
low bank - when they would stand
on their hind legs & go one step
till when down they were lying down,
I hope the same was true
I suppose that if the day had been
brighter - instead of the dark - that
is they would not have been so
quiet.

To Hunt
Amos head

I saw a very green water hole in the
meadows, also found a dead skunk
and an arrow head. How much all
these things tell, & how poor, & in what
a short time I have put them.

Lake is

I visited the private burying ground
near the old Lake homestead, when
there are given a number of stones,
most of them to the memory of Lakes.
There is also a stone erected to the
memory of an Anderson's gone to a
Merchant. I am never related
distantly to the old Lake family,
as we have of the old iron
spoons to this day, with the letters
inscribed on the handle. I have
also a pocket-book with "D. L. March ^{The} 20-1802"
cut on ~~the~~ side & two vessels on the
the grandfather ^(Chapman) mother was a Lake

My grand mother's sister, Mrs. on.
married one of the same city.

A sparrow

In the course of my ramble I came to a
little pool, in a field, on a hill top.
It was surrounded by button-bell bushes &
alders, a large tree had been felled &
lay ~~flat~~ in the water. Mid these bushes
& the broken tree top was a song sparrow,
not but what there are many song
sparrows by many pools, but this one
seemed so lovely & sad. I sat down
near him soon he came out of the
thicket & sat on a bush near me, singing
faintly, cold perhaps for his feathers
were ruffled up about him. I sat long
& the sparrow sat long, &

in his faint-song he told of many things.
I thought he was singing for me perhaps,
for it was so faint that none other
could hear. He seemed sad yet contented,
& I thought that if I should wander by
these pools & through the woods always, that
nature would give me that same mild

Poor sparrow & poor ~~man~~,
our troubles are, we still have a mutual
sympathy.

Monday April 18. Today the ground is covered
with a light fall of snow and it fell
in the morning in very large flakes
As it has melted some, it has frozen
the large branches & the smaller ones
in consequence many of them have been
knocked off and are lying on the ground.

The red maple on
the house has two large branches broken
& the little trees in garden, but many
of them are still standing.

April 19. The ground is covered with ice this
morning & the young shrikebirds lean over
hardly be seen under their own coat of
frozen snow.

Sunday April 24. I went to Whitebogues
today to look in the area where some
of our favorite birds keep. Ceryle under
Lycium spendax girders, & stataula, & L. repens
~~some~~ were flying about. I also saw
sensible bees, hemelias were plentiful on
the sandy roads; I saw repens & girders
With my glass I can watch their movements,
see them one after another as they pass.

When a brook flows into Old Place creek
by a piece of meadow land, I watched
a snapping turtle making his way
across the ice to the

He was one of the largest I have ever
seen, & I noticed his humming & wing
gats, with much interest. There was also
a little band of song sparrows flying
about near Serpentine, but they did
not seem to be afraid of him.

Fish crow

I found three or four pairs near together
with a crow's nest in each and a
pair of Fish crows were flying about
much excited. I climbed up one
of the trees nearly to the nest, but
thinking it would do me no good
to disturb the poor birds, I came
down again. They were still flying
about the tree, when I came back
several hours after, & I was glad that
I had not seen any of their eggs,
though a Fish crow's nest is
a prize in this locality, being about
its northern limit.

Caroline
John

Two Carolina doves were picking
about the ground of the same corner and
when I came near, they flew up in a
tree not appearing much afraid, though
so short a distance away. When they
flew away finally they made the
peculiar whistling noise with their wings
that I have sometimes heard. I stood watching

by the fence thinking they might
return, when I saw a large hawk, that
I had noticed flying over a swamp,
approach the spot where I stood. They
One came flying in great
haste along the borders of the salt marsh
though keeping some what in the trees but
I could not see what because of the
other done, nor whether the hawk captured
it or not.

Habits of
chicadee-
I was lying at full length on
my back in the corner of a room
looking at all the pretty things about
me, when I heard a chicadee which
brought me some news to which I was
I remained perfectly quiet, & the chicadee
was its usual note to what strange
emotion I might be, & meant to investigate.
It came close, within three feet of
my head, & I saw it coming, & was
collecting some of its
notes. Then it flew over my head & hovered
near my hat, & I thought it was
going to light ~~on~~ it, but at last
it flew away & I saw no more.
Dr. Thomas tells of a chicadee that
hit on some jays that he was
carrying, when he lived at Walcott.

1867

Yesterday, April 30th. By a piece of good fortune I was enabled to go on a tramp today, & took sister Bessie along.

It was very cold & windy for so late in the year, so I saw but few butterflies abroad, there being none of the little blue ones we plentifully have - the day so far but few grasshoppers have appeared, all that I have seen being C. viridipennis, though Felix must be out.

I heard the first Chantrelle of the season & also saw the first Green Heron. Several species of violets are in bloom, also Anemone, Claytonia, Bergmoe, Erythronium & Linum catharticum.

In both trees we found a pair of flying squirrels, and I also looked for the owl that lives in the apple tree near Annadale, but it was not there.

Garter snakes. A few garter snakes were abroad, but were not at all lively, being too cold. However, the walnuts under my favorite tree were just as good as ever, and as usual I brought some home, for squirrel & myself to eat, on cold occasions. The trailing-arbutus is about out of flower now, I only found one flower in a patch that I was visiting.

Sunday May 12. Day was quite pleasant
yesterday; the wind from the west,
warm & pleasant. I rambled alone
through the Canon valley & vicinity, & found
quite a number of interesting objects.

P. Luna I was greatly surprised to find *P. Luna*
hanging fast of an old fence, as I had
supposed it to be somewhat early for
them yet. *Pseudoea longitarsis* was
abundant, & also an *Elater*, numbers of which
were perched upon the tops of rocks.

Wood ticks I captured a few beetles and in one locality
wood ticks were thick on the ground, I never
having seen so many together before.

Chenopods Chenopods were also plentiful today, & I saw
two Brown Thrushes the first ones of the year.
Mark-Maniged The *Mark-Maniged* is in flower.
Standing in a clump of briars, I saw the
leaves move slightly about the base of one
of the stalks. I watched carefully & by & by

E. viridis saw *E. viridis* stick his head out from
under a leaf. Going closer, after getting
kind of waiting for it to move, I discovered
that there were three snakes under the
leaves, two ♂s & a ♀. The ♀ was one of the
largest snakes I have ever seen, but the
males were quite little fellows. I disturbed
them slightly & they crawled off, but
I found the ♀. I sat down near by, waiting

to see if the ♂ would come to her acc-
Polly soon came down the hill, and
about a little, evidently searching for his
mate - came within a foot of me & he had
found the lost one, whipping his body with
many a turn about her - He soon as the
♂ approached the ♀ vibrated her tail rapidly,
though not enough to make any noise among
the dead.

Crow nest Near Logans, finding a crow had built her nest
so near to houses & the road - I wish the
bird had success, but I doubt if she ever raises
any young.

How Limnea tastes In a small pond I found a species of
Limnea & tasted a piece of its meat. It
was very good & smarted my tongue sharply
for some time. Perhaps electricity was developed with
the injury of the fin, however, I will try again with another fin
& I could at my pleasure to lay down
Bats, Philosophy in a brief battle & watch the insects & birds,
I see much more often times, than if I
were walking about. For me there are ^{innumerable} ~~many~~
more beautiful than the little green
lawns in front of the village houses, yet
how careful these lawns are tended, showing
the admiration of their owners. It is unfortunate
in some respects for a civilized man
to have these uncivil & wild notions,
It cannot lead to that happiness &

contentment that made a citizen interested in
the community, & therefore a good one, though
he may be law-abiding, loving the good in
nature and the quiet that broods in meadow
brooks. °

✓
- a day fly.
I saw an Ephemerid¹ fall in the swamp
as it was flying over, and - after struggling
awhile it died - its short life as an
imago was made shorter still. It is but
length of days that the ant. & bee are
so much, an hour more or less spent
in making the nest or comb, does not
count so greatly in their history. It is
as with a man or turtle, that spends an
idle hour basking in the sun, for though
turtles & centurians, & have not built
a city, yet they love the sun shine and
are good philosophers. Their simple
& calm manners, tell of the rest of
of the race.

Atkins. May 4. Catbirds, the wood thrush, swallows,
and the blue jays, are all here, & the
butterflies are really here & the great fly
of the forest.

May 5. The oriole that builds in the
elm near here, has arrived. I have
seen for the

Sunday May 8. A young fox was sent to a
man on the Proctor. She not knowing what to
do with it, turned it over to me. It probably
is a month old & is very obnoxious,
stopping to looking at things over its head
as well as prying in all nooks & crannies.
It barks a little, & also has plaintive whines.
In running about the nose, it manipulates its
hind legs very dexterously to their length.
Looks somewhat as if it were running side wire.
While I was writing the above lines it was
standing with fore paws on my feet looking
up into my face - its nose, tips of
ears & feet a black, with a few
white hairs on the ends of its tail.

Rain, Rain, Rain, but even in the rain I
go on a ramble sometimes, & find it
pleasant under such circumstances.
It is good to see the ruddy faced
boy who drives the car, & then he
will be sure to feel to hear the
first golden-crowned thrush, with its
turkey, turkey, turkey, & from your retreat
in an old barn, listen to the
wood thrush. Birds rather
like a gentle rain it would seem
judging from their songs on some rainy

Robin building
nest.

& the robins in the garden keep on
building their nest through it. all
I watched the female bringing
lumps of mud - to line it with.

Today, & each time

she left the nest for a new
supply, she goes all.

In my ramble I passed upon

about 100 yds
from the

a male land turtle (not eye), in a hole,
about 5 in. deep. Near this one about
a yard away, I saw another opening
in the ground, & putting a stick
into it - discovered another turtle,
a female with grey eyes. So it seems
that the sexes travel in company,
at least at the same year.

There.
Phacelium anemonoides one of the dog woods &
a Vaccinium in flower. I captured
two Geometrids.

Sunday, May 15. With a companion
to Ellingville, walking in the woods on
the west side of the R. R. track back
to New Dorp. It was a pleasant spring
day, and many new plants were in
bloom, birds arrived and insects abroad.
The pink azalea is just coming into
flower, as is the crane's bill -
Trientalis americana is in full bloom.

Flowers
Panicum

Pogonia and we discovered - an orchid (Pogonia)
that is not common on the Island.
Large pear
tree
Winter green
also found a patch of winter green,
some of the plants still having the
berries on them. In one patch of
fossiated
dandelions we found a number of fossiated
flower stalks borne by several different plants.

Holm
The robin was in its nest in
a corner tree, that had little across
a white hole. The nest was about head
high from the ground, & we walked past
it & came back again, within a few ft
of the nest before the bird flew off.

Field hunting
A field hunting hawk had laid two eggs,
and a cow bird had placed one more
in her nest. Many other nests were
observed in this section, & there is
also a pair of red-shouldered hawks
that build here. However, the birds
fall into good hands when we come
by, & we only spoiled one nest this
day out of all we found. This was
a phoebe bird's & I was the robber, as

have never had any of the eggs of
this species. When I found this one
today, the bird has built for several
years and as the bird builds by the
doorway of the old broken shed,
so sure 'may we expect to find'
phoebe's nest, over the window,
where it was a year ago.

A high boulder had covered the mound
with chips for a radius of 10 ft.
on one side of a dead tree, where
it had dug out its nest, & when
we panned on the tree the old bird
called its plaintive cry from a short-
distance. So we went away.

Among grasshoppers H. phaeocephalus &
some of the species of Petix were abroad.
Apanteles noctuosa & a large geometrid,
larva, and a ♂ of Celithemis
seen.

I do not mention above that there was
a little warbler flying about that
I took to be the "Black & yellow
warbler," said to be common in
these islands.

Saturday May 21st. The half holiday meaning
has some supporters & I got away from
New York on the 2:15 boat this afternoon.

Black & yellow
warbler

I wandered about the woods until 5.15
when I was forced to come home to
supper. After the beautiful azaleas were
in flower & all so green and pretty, some
found set fire to the Harbor Woods
& most of it is now ~~in~~ in ruins. ~~It~~

It ~~costs~~ ^{costs} my breath away when I see the
woods on fire, & nothing but ^{in my rambles} ~~nothing~~ but's worse & I
mourn if nothing so much, as the burned
woods - Poor flowers, poor cherubs, who
have started their little homes under some
tree, & who can tell of the thousand
things that ^{each} fire destroys! Those pleasant
nesting places when the crickets sing, and
on which I laid in early spring when
the sun ~~was~~ warm, are burned,
& nothing but black stalks of the little
trees & bushes, with a few larger green trees
remain.

I saw some little wood frogs about an
inch in length, that were probably a year
old. A species of *Ptychocheilus* was hiding
away under some loose bark and *Hypocistis*
salicoides ^{on the} ^{side of} under a fence rail.

Platanus *truncata* is abundant, & I heard
some crickets "singing".

Polygonatum ^{*Engelmanni*} and *Umbellaria* are in flower, and

I found some white examples of one of the
common violets. It was not the bird's foot violet
which is the common one.

1889

Sunday May 22. I met Martin L. Linnell on the R.R. cars this morning, so we went for the day's ramble together. Linnell is well named in beetles & the methods of taking the various species.

Near the Fair Grounds we took off our shoes & stockings, & waded in after the beetles & captured a few. We also found a species of ^{Burton} ~~amphipod~~ you & I saw many most of the individuals carrying their eggs on their backs. *Belostomat* was also brought to the surface. About this pond I noted *Tromax* & *L. semifasciata*. Some of the "Mallet-headed" dragon flies were abroad. From these little ponds we went over the hills turning our shoes & socks, towards Garrettsboro, & finally came to the end of our ramble at Clifton. We also dipped the water net in other ponds on the way, & captured some specimens, but it is getting some what late for water beetles now, & the ponds are quite full, making their capture difficult.

We found a ^{small} *Chrysomys picta*.

and one ♀ & two ♂

water snakes together. It seems to be generally the case to find several ♂ associated

Chrysomys &
picta.

Prospidionotus
sepioides

with one of them the breeding season.
Linnell & I had long talks over the
plants we met with, over the white
Prunella, Alnus, chestnuts, huckleberries
& many others that are now in bloom.

The trees are of the deepest green
& some of the little valleys looked
very beautiful, Linnell & I both being
highly pleased with the well
hills in their summer dress.

May 26. The wild geranium is in full
flower now, & when passing a thick growth
of small trees yesterday afternoon, I was
struck by the way in which the thousand
petals of the flowers looked toward the
field. They must needs grow in a thick
dark wood, yet each was true to the light.

I saw quite a flock of cedar birds in the
garden a few minutes ago; I heard their
pleasant note coming to the window
then they sat, side by side
on a pine tree.

The singing mouse is still here.
I let her out to clean the cage
a day or so ago, & she ran about the
room for quite a while without singing.
However, the moment I tried to
catch her, she piped long & clear.

May 27th

The Eng. sparrows are now hopping in the
mornings along the paths in the garden, looking
for insects to feed their young which
follow closely after their mothers. The
labour of searching for ^{these} insects seems to
fall generally to the lot of the female birds
& I notice they never deceive their young
for however loudly the male crow they
do not go near them until they can
give them an insect.

I know of a house on a brick house where
the sparrows run to & fro, crawl up
between the beam & the bricks to get into
their nest. After they get there you
can hear them running about between the
roofs & the ceiling like rats in a

There is also a house in New Brighton
where the sparrows have built their
nests over the windows, each nest occupying
the N.W. corner of the little gable
above the casing. They must get some
advantage thereby, such as the morning
sun & have no taxes for their shells.

This afternoon in my own home, I
saw quite a flock of indigo birds &
sat down to listen to them sing.
Part were on one side of the road
& part on the other & every little

white one would fly across, its blue
back reflecting some of the rays from
the setting sun--

There was also a scarlet tanager in
a bush tree whistling merrily, for
I think I may call it whistling
as it is so like the Robin's song,
with a note of the red winged
black birds added.

Small boys
& stone.

I met three small boys discussing
the merits of their mothers' stone. One
said their stone was no 7, & the other
said theirs was no 8, & he was the
winner.

Musk rats

Mr. VanPelt's Queer Adventure.

Mr. George VanPelt of Stapleton had an
odd and unpleasant experience on Monday
night. While passing the wall that en-
closes the grounds of Mr. Joseph Rubsam
at the corner of Boyd and Wright streets,
a musk rat jumped upon him and fastened
its teeth in his shoulder. It presently tried
to get a hold upon his thumb but was un-
successful. When Mr. VanPelt took off
his coat the animal still clung to it for a
moment and then jumped off. Mr. Van
Pelt, however, succeeded in killing it. Its
body measured over a foot in length.

Through the most thickly settled portion
of this little village then runs a
main brook or "sewer" the
nearest the bay having been
excavated yesterday. I saw a small
stand a musk rat in this
village sewer & I was informed that
they were not at all uncommon
then. The paper said that two
fell down his ana way, as they were
exploring the village street at night.
He thought they were attacked by the
which shone brightly through the windows on
the side street.

while one would fly across, its blue back reflecting some of the rays from the setting sun.

There was also a scarlet-tanager in a bush tree whistling merrily. For I think I never call it whistling as it is so like the robin's song, with a note of the red-winged black birds.

Small boys I met the small boys discussing the merits of their mothers stoves. One said this stove was no 1 & the other ^{where mother's} said this was no 8 & he was the proudest.

Musk rats

There was a painful p
box, peep

in a low vo
t up at him,
d to talk, &
go away for
relations to

st painful p
box, peep

Through the most thickly settled portion of Pomphreysville village there runs an ancient brook or "sewer," the part nearest the bay having been walled in. Yesterday a small dog captured a musk rat in this village sewer & I was informed that there were not at all uncommon there. The farmer said that two fell down his ana way, as they were exploring the village street at night. He thought they were attracted by the light which shone brightly through the windows on the side wall.

Sunday May 29. This was one of the days when a bumble bee does not throw up its hands to stay in its nest or go abroad for honey, but being much better provided in the way of sustenance than bumble bees

There was no lack of mosquitoes, & when I
ate the last half of my lunch, & got
up into a pulch pine tree out of their
reach. When I looked to the jays and
birds, wood thrushes & many other, & more
than they could sing so joyfully, when
the ground below ~~them~~ was so black
since a forest fire. Most of the little
trees were dead, the pine in which I sat
looked sick, & if it was not that the
country is so low & flat, in this portion
of the island, it would be as bare and
barren as some of the isles are now.

Wood fires

In all my tramp I kept in the
woods skirting the salt meadows through
which runs the creek. I started
at 8 A.M. and went to a sort of

Island in the

"Island" in the meadow, about four
miles distant - & back ^{over about the same ground} a day, following all
the windings. I also made one little
excursion off to the west to look into a
pond - which I found dry, & ate ^{the remainder of} my lunch
under some persimmon trees, when I had
a pleasant view of the Hills & Sound. ~~There~~
I put my hands into several nests
belonging to salt-marsh wrens, but they had
laid no eggs as yet. It was amusing to see

... lupine & helle, on it - and also
... of this upright character, but
one that grows on ~~Rock~~ Hill vicinity. It
is not found as yet in N.Y. & not grown
in the mountains in the south & there is
one place in Virginia, so far as is yet known.
It used to grow in old time near South Ferry
in Brooklyn - Y. So my find was good
as - I have never more till a green herb
at this place about a 2nd found, than
I have ever seen together before, and it was
as - I leave for me to watch the
4 years their strong record. My little
meadow, ^{island} ended abruptly in a trace,
about 10 ft above the ^{sub} meadow and was
covered with a thick growth of low buckelberry.
The most rats, one of which I saw in
the creek close at hand, have turned
this bank back up from the meadow,
in the most bold & open fashion, showing
how ^{there are} seldom disturbed in this

On my way from the place, where I
will not say I left, many times, I found
a small patch of Androsace
With its wealth of yellow flowers it does not
deserve the name of being poor.

I stopped in to get a drink of water.

1887

Turned, as the
land & a

when I got out on the road again &
noticing some mosquitos net tackled on the
bump, I asked the farmer if there
was like. He nodded. "The well."
"Well he is a good man, he is why
I like that. I asked him" I said
but he said "I am not a farmer" he said
to "land" he said he "landed" I
out & after he said they were his
was back again, & he said to the other time
he was found in the field
me I asked
him if he had seen the change
color. Yes he said he "the are the" "the"

He said he had seen the change
the best of the land. He said he had
seen a man going to the animal
One said I was going to the said I
was going to the other he said he
was going to the other he said he

In the end I found quite a large
with more than one
he said
about the land. He said he had
seen a man going to the animal
One said I was going to the said I
was going to the other he said he
was going to the other he said he

... a mile or so, and then to
Station, when I took the cars

Near the Four Corners I found a rabbit's nest
in plain view, in a low bush by the road
side. I never see the build anywhere; on
a fence rail or in a shed even.

In blood-root valley I observed some interesting
plants, & also smelled the slippery elm
trees. Out of one, I saw some sap running,
or at least the bark was slightly wet with
it & I suppose it was that

that gave the odor to the air. In this
valley I found a female land turtle, eyes
dark reddish brown.

Swamp drops

The swamp drops that have been in the garden,
have been in bloom only a few days. I dug the
first one up in the grass five or six years ago.
Those in the fields are also now in bloom,
so I think that our wild are much
later in blossoming than the cultivated ones.

Field barn

When ever I find a field to string nest, I
expect to find a cow-pen black bird's egg in
it and the nest I found today came
up to my expectations. However, I took the
cow bird's egg out, & hope the bird will
be able to sing where I can hear them
most easily, instead of singing in the

1887

I captured some more & quite a lot of grasshoppers, &
C. viridifasciata. I notice that *C. viridifasciata* seems to be perfectly
 silent except when flying, & then it is only the noise that
 makes the noise so common in numbers.

I met one of the Dupuis boys, & we had a
 long talk. [Dupuis boys] He says
 that the great [Dupuis boys] we came back again
 to the [Dupuis boys] the [Dupuis boys]

Chris [Dupuis boys] the [Dupuis boys] the [Dupuis boys]
 in the [Dupuis boys] & [Dupuis boys] a [Dupuis boys]
 [Dupuis boys] [Dupuis boys] [Dupuis boys] [Dupuis boys]
 [Dupuis boys] [Dupuis boys] [Dupuis boys] [Dupuis boys]
 [Dupuis boys] [Dupuis boys] [Dupuis boys] [Dupuis boys]

Chris & Paula

The [Dupuis boys] the [Dupuis boys] eggs for
 [Dupuis boys] that [Dupuis boys] [Dupuis boys]
 a great noise, he says to whom there were
 in the [Dupuis boys] found that they had
 5 out of the [Dupuis boys] eggs belonging to the four clapper
 rail. In the [Dupuis boys] the [Dupuis boys] we looked
 for the [Dupuis boys] he [Dupuis boys] that - a [Dupuis boys]
 once [Dupuis boys] for he [Dupuis boys] the eggs & saw the
 bird. "They thought it was funny for a [Dupuis boys]
 to build in [Dupuis boys] [Dupuis boys]"

Chris built in

without [Dupuis boys]

Chris a

bird

That way he used to "catch a bird for [Dupuis boys]"
 was to get a lot of string & put it in a
 coil about her nest when she went in

it, pull the string & entangle the poor area. However, he said he didn't do it any more. Last winter they saw some large tracks, & his father said were either made by a coon or an opossum, he had for the first

Wild dogs

He also tells very interesting stories about "wild dogs" which now and then make their appearance. They shot ^{this spring} one that had been roaming about for six months. Thomas tells of the wild dogs along South Beach but I don't think that there was no man on this island, at least I never saw any.

This morning he and a dog had captured a mouse, a little

The boy

This little boy, my old boy is a wonderfully good observer & an interesting talker. I pointed out to him a faint path in the woods & right away he said, "some one has been dragging something there", & looking a little further on I saw ~~as~~ a few sticks lying in a pile. I asked him how he knew, and he said on a path "the leaves ought to all lie flat and a few men upon end" in the path I had pointed out, ^{though the wisdom was no faint & the path was a secret one.} He promised each other, before parting, to go on a tramp together soon, & he seemed to be glad of the prospect.

In an old building I found a capture

1887

Hawk & squirrel

birds nest, built on a little piece of wood tacked
on to one of the rafters. The young were so close
that, they could hardly all sit in the nest.
I saw large hawk in the thick woods,
fly up near a cedar, & going to roost
I found that the tree contained an old
crows nest, but a squirrel had roofed
out. Out of this nest much of the
cedar bark had been pulled I think
by the hawk, some of which lay on
the ground & the rest about the nest
itself in the tree. I climbed up, but

Bumble bee
in old nest
of squirrel.

it only contained a bumble bee,
that flew out with an angry
Saturday "morning" The half holiday monument
is of use to me for some times I may
get the other half too as I did today.
I went to Mendocino, & so through
the woods to where my friends the
deafening boys live, & I wanted him to
ramble on the meadows.

Young birds

Young crows are able to fly to leave the
nests, & indeed I think some have
 flown. Among today I saw two nests
with well grown young birds, in one
of which they were sitting upon the
nest - cawing loudly.

On the floor of the maple - of

I found a number of Leucicoma beetles, a small grey-brown species.

Costed Tit

The chee-chee-chee, of the costed tit, was one. The most common bird notes of the these woods, together with the twee-twee-twee, of the golden-crowned thrush.

Golden-crowned thrush

2. Turnus

Among the butterflies that I have made a note of in the proper place, was P. Turnus, the first I have seen this season. As they then about the yellow thistles, ~~that~~ have just come into bloom, I had a good chance to observe these, all I saw being males. Two I captured with my fingers & then let them go again, and they seemed quite glad. Opposite the Dupuy boys house, in the woods, is a large chestnut, 8 ft. 6 in. in circumference, ^{4.5 in. dia.} of bark, all being dead, on a space of two feet, which stops back up to several branches above. This tree looks quite odd, when viewed from the side when there is no bark, with its tuft of green leaves on a dead tree.

Partly dead chestnut

My young friend & I went down in the meadow by the New Springville creek, I taking off my shoes & slinging them on my back; he with a pair of boots

that let the water in at the tops and
out at the bottom, so they were well drained.
He said he left his daughter at home
so she could not get out.

He said he had been to the
court house and had seen the
rest of the family. The black birds
had been at the house, and he
said the eggs were all fresh.

He said he had seen the
road and the house and the
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biggest one I think - 9 1/2 in. - Length of
 carapace 1 in 2/10. ~~Length of~~ ; length of big claw
 2 in 1/10.

Found flag,

As we found no mud here, we left
 the meadows but not until we had
 feasted on the sweet flag, eating the
 bread, which they said was very good.
 during which time he had tried them
 often under such conditions. He next

went to the point near the old
 fort. He was looking for me
 if the sea was in the way. He
 began to be very shy. He took brickbat
 and he took the stones intermixed and
 found a few old nests that might
 have been built by him. He

White bellied man

one old nest, about fifteen ft. from
 the ground. White bellied man had
 taken it. He was sitting in
 out, & it was fully to see him
 sitting on a limb of a tree with
 the green leaves. When he got
 on the ground he quickly got into the hole
 that he knew so well.

Crows nest in
 a pear tree

A little way from this point there
 is a pear tree (in a field) -
 containing a crows nest, the structure
 being only a few ft. from the ground.

in an orchard. It are orchard, where the trees had been
blasted close together, we found that
the little young birds had built, though
the nests were not now in use.

were a lot of black berries. I tried
 the water in the lake and there is no
 more than the same old water
 from the lake is not good and
 the water is not good for

Prothonotarycatcher's building 'is or not a nest belonging
nest' to a male instead of a female.

Indian mingles
back of Richmond
the big crab, I brought nothing home.

Sunday, June 5. Went to the spot where I found the ^{upright} Clematis last Sunday. The soil is also interesting on account of the plants that grow there, there being a great deal of *Lupinus virginica* pea

Quercus obtusiloba, & the variety of the
Chestnut oak known as emilis.
latter was only about 2 ft high but had acorns

On the same morning
sitting on a stack of salt hay, and
soon after Arthur had taken his
snack out of the box & set down
to an easy position, I heard him
exclaim, & looking about I saw quite
a large black snake making off across
the open & into the huckleberry bushes
behind. Arthur had been sitting on the
snake, while after a time decided
to get on from under the small
amount of hay that separated their
bodies, & so made off for a place
where no man could sit on him.
Then I went on for the Chamaea we
saw some Chamaea ^{in the} syriaca, far
up among the Hudsonia in the
sand, where I think it had come
to lay its eggs. We also dug some
ground nests (Spizella), which I intend
to write.

Let me lunch in the old
little Church at Matchogue & saw
more ^{endless} doves than I have ever seen in
one day before. One of these birds

was in a barren field & we stood
watched it for a long time. It did
not seem whether to stand still or
fly away, & it was not until we
approached, somewhat nearer that
it decided to let us know. The
muses of its mind.

Magnolia. The few trees of magnolia that
grow in a swamp near Wicketogue
are now badly broken by the boys
common that go for the flowers, so
that in a short time there will
soon be no more. Near this
swamp is for a number of
little oaks that we think may be *Q.*
ilicifolia. A species not recorded as
yet from S. I.

Chenille. We did not see many birds' nests,
& very few insects, for the day was
cloudy. I collected a Mrs. Chenille
with 11 eggs, & under a dead crow
found some burying beetles. I captured
in the road, *Poaphila quadrifidaris*.

Poaphila Tuesday June 7. My little box went away
for about the first time to a man who bought him
from Mr. H. Besides the notes
I made on his habits in the May
Proceedings of the N. S. A., I have written

as he grew older, many other interesting
things. He got very silent of recent days,
rarely barking, retreating to the street
patent upon the least sign of a disturbance
in the neighborhood. Except when
eating, he was very playful, but when
a bone was in his mouth he became as grumpy
as most animals under the same
circumstances. When playing he had
a peculiar grunt, & would run about
me in circles with his ears long flat
on his head, I all the while making
a half effort to catch him. One day,
coming down the walk, he came up
close to a crouching cat, before he discovered
her, & it was some cat to see the look
of fear & ~~sudden~~^{the} retreat which followed.
I noticed him one afternoon walk up to
a red geranium, & smell of it several times
& look at it carefully, evidently as a cat in
in so pretty a flower. But today when
they went away, he had greatly changed
from what a few weeks ago was a poor
helpless little beast. Bright brown eyes, brighter
than most human ones, & a playful step
made him a pleasant companion in spite of
the fact that I was always afraid of
his running away, not from me, but

Wild geranium

Young robins

that would not last of judgment in what
constitutes an end. Hence.

Friday June 10th. The wild geraniums in the
garden, have gone out of bloom, & the ^{young} robins
have fled from their nest in the pear
tree. By many signs we see how quickly summer
is going. It is no more than appears at the
door, than by the ripening berries in the
of the departing season.

I saw today one of the little robins
hopping about the ^{nest} father who was
catching worms for it in the grass, &
upon climbing up to the nest I found
that the others had also fled. Last
year the nest was in the next tree to
the one occupied this summer & was
nearly so well placed as the present structure
which is equally held by a number of
grafts growing from the tree top. Perhaps
last year, the birds being younger, did not
throw so much as they now do, & therefore
chose the right for their home on an un-
limb from which the nest fell shortly after
they had gone.

P. antiope
Caterpillars

Panassa antiope caterpillars are now turning
up to change to chrysalids. I brought
three home in my hat this afternoon & as
the worms have commenced to spin the webs wherein to
fix the chrysalis last

Saturday June 11. Getting away early this afternoon I
walked up toward An into the thick growth in the
Harbor Woods. It was a beautiful afternoon, with
great numbers of insects flying. I saw

Aschne here Aschne heros, & found a red-eyed vireo nest
containing one egg. I watched the bird for a
long time before she concluded to leave the
nest, & then she was very quiet about it.

Almost Butterfly
How apt we are when catching butterflies to neglect
the fact that we are killing quite intelligent
animals. An elephant, a lion & a man, may
each be caged for what can they do against
the multitude & it is so with the butterfly.
Think if the greedy collectors of insects — as
many are — would not watch the
butterflies make love, with all their little
flutterings of the wings, they would come
to respect their lives more & often spare
them their liberty. They do certainly enjoy
a sort of happiness. I watched, this
afternoon, a pair of A. remator, E. pylades,
N. eurytis, & P. zabelow. ^{or} zabelow would vibrate
the wings rapidly, just as courting birds do
& the male E. pylades would chase away all rival
males of his own species, as well as every other
butterfly, bee or wasp that came too near.
I found some new ripe drum cones, &
very old Phoenicopterus that could hardly fly.

1881 Sunday, June 12. The sky has been over-
cast with blue clouds & the wind
from the north-west.

We wandered over the hills towards
Garretts Station & back again over the
same hills home. With the exception
of some stuff, (I suppose, suffragans?)

(crucians) I did not get many insects, though
I saw a very interesting little butterfly.

It was a specimen of Limenitis disippus
about one half the usual size. In the same

swampy place I saw the butterfly, the Sanguinaria
grows in abundance & to me is always a very pretty
plant. He examined quite a number of interesting

specimens, particularly the bush Aralia & the Pod
(Cruciferae). The ferns, Adiantum are now in

their best of green. The wild-honey-suckle
is in flower, & the the

sides covered with black berry blossoms.
Under a tulip tree, I found many of

the blossoms that some bird or squirrel
had pulled off, eating the side out

of each.

As we walked along, we found quite a number
of ^{birds} nests, without looking for them particularly.

Several cat-birds, a brown thrasher, a kingbird

4 a car-meat ~~gr~~ ^{gr} ~~beasts~~, came to mind,
all having young ones in except male
the Kingbirds, ^{to} ~~wh~~ ^{wh} we did not think.

Foot 1. On an alder leaf, hung a red bat, which
flew away after we had disturbed it a
little. It chattered most of the time before
it took to wing.

N. W. W. When I go out for a ramble, I pull off
some bits of bark & rub my face & hands with
them for to me they have a wild and pleasant
odor - the scent of the woods. I find that
the black-bird's ^{chick} ~~chick~~ ^{chick} are ~~not~~ so good for
this purpose as those of the mockingbird. As
we have a natural color, but we also have a
natural odor, and let it be that of the
stout hearted buckley with its brauny arms.

June 15. The oriole that builds every year
in the elm near the door, had a very queer
note for a week or so, though now I hear
it cutting its regular one. I wish that it
learned it from the robins in our own garden,
for it was much like the quail's call, &
not nearly so pleasing as the the oriole's
usual call.

Engina mouse
escaped &
2. p. 100.

Several days past, my singing mouse
& her offspring, escaped from their box by
gnawing a hole through its side, & all
day long wandered about among the

toys & boxes in the storeroom. I spent an hour in the morning trying to catch them but failed in all my attempts, though every little while one would enter the old cage. All the while the mother mouse was making loud, & when I came home in the evening she was still piping, having hidden herself during the day behind the big chest that contains the chicken feed. As there was no getting her out, I set a trap for her in the kitchen but captured none. I searched for mouse the younger & found him tucked away in an old black cloth, that I had used to cover up the fox with. In the morning I found the mother mouse in the trap; so I have captured my pets again.

The Vireo's nest in Mrs Vireo, to see if any one had disturbed it. I found her there, as usual.

So very quietly, indeed, that I came near, examined her dark red eye, & passed just under her nest without in the least causing alarm as far as outward evidence was concerned. What the little creature may have thought, I would much like to know, but a sparkling eye was her only language, when I was near.

1887

P. 1st, 11

I neglected to mention above, in connection with the Podophyllum, that ^{3 observed} the first years leaves has the ~~the~~ ^{more} than it on the sides. The new is that the two leaves of the same year growing side by side could not develop ~~in~~ that large circular shape of the first leaf, without crowding each other.

Parrapa caterpillar

A dead caterpillar in a leaf, was being demanded by two specimens of the genus Parrapa.

Ant nests.

Some of the ant nests, which are numerous in the neighborhood of Woodbridge, seemed to be carefully investigated. They are many of them two feet high & about the same broad, belonging to the ^{large} reddish brown ant, also common on S. I. I think that they ^{then} most build their nests when the ground is wet, as at Woodbridge. On S. I., I have noticed their nests on ^{or} ⁱⁿ ^{the} high in swamps ^{so far}, where there are hill sides have been ^{so far} above the level of the soil.

Did find

Sunday, June 19th. Went alone to my little stone patch ~~in the woods~~ ^{in the woods} did I find it. I not only ate a lot but brought home many, & some I ^{thought} washed with my big shoes, ~~as to~~ ^{as to} I washed with the ~~shoes~~ ^{shoes}. The patch even ~~was~~ ^{was} a small piece of ground, & I left many for the birds when I came away.

Red headed
woodpecker
Near Lake, red-headed woodpecker
a little further on woodcock. This last
bird was quite common here in 1885, since
which time I have seen but few. The
woodpecker was on the ground when I found

I entered a small house and found
the first sign of the
nest. This is the first time I have
seen a bird built in such a position. A
song catbird was sitting on a limb close
by the nest which it had recently left.
I went up & scratched its neck back
little, before it decided to fly away, &
a poor funny looking little beast it was.

The Grosbeak's nest that I found last Sunday
was empty today. It, however, contained thousands
of lice some of which got on my face &
hands in my efforts to see if the
young birds had fallen in the tangle
of cat-brier, - near the nest.

Young toads have left the water.

Anax junius, Platynus trimaculata, Libellula
4-maculata, E. semifasciata & Perithous domitia

The females of E. semifasciata have small
the hind green spots on the legs, whereas
the males are nearly always brown.

Robin

Myiophila sulphurea also made a slight noise when flying but not so great as viridiflora. These were the only perfect grasshoppers I saw today.

Rheumaptera

Rheumaptera

Rheumaptera luteata was captured, and Rudanus lygatus was seen. The latter is becoming more common.

I. I., though up to four or five in. had been seen. Mr. Henry showed me the

Rheumaptera

The Rheumaptera was common here in June 1884. I have seen it for the past two

that

It is a kind of chloris & may now be seen in the woods near the lake. There is a hole in the ground where it is, & a small hole in the ground where it is.

Tuesday, June 21st. Sunday I visited the

The bats in the cave. The cave is a place, where the bats congregate. The bats are now about half grown, & I found one little bat hanging in the cave. The old bat says that his dog kills some moths every night, & I picked up the remains of one that had lost its life in this way. He says he finds the young bats on the floor ~~under~~ & throws them

out of the window, the little bat
being unable to fly very well. I disturbed
one of the clusters & it had been to the
"floor", & almost immediately an old one came
close to me & lit on a beam. I suspect that
it was the same, but not thinking of it at the
time I brought the little one away.

I could not get it to eat anything, so tonight
I found it on the cherry tree & it climbed
to one of the highest branches.

The old ones are still feeding the
young ones that left the nest in the garden
about the 10th of the month.

Wednesday, June 22. About 9 or 10 o'clock last night

I heard the little bat chattering up in the
cherry tree, so I got my lantern & climbed up
to see what it was doing.

I found that it had come down the tree
again from the topmost branch, & was quite near
to the main trunk itself. I brought it down
the tree with me, it running over my
back & finally resting close in my hand,
when it kept very still. I afterwards gave
it some milk, which it seemed to enjoy.

Last evening I captured a female
of S. 20, wishing to get some eggs, I
put her in a kale box, thinking she would lay
them there. The box had a small hole in its side & so
put her abdomen through & laid them on the outside.

disturbed.

Honey suckle

June 24. When looking at the cultivated honey
suckle, which is beautifully in bloom now, the
first thing that one is apt to observe is that
the flowers are of two colors, some pure white
and the others buff. I find that the
white gradually turn buff, & then after a
time fall off. It is while in the buff
stage, that they give out that strong odor
that characterizes so well the garden
when the honey suckle grows.

Miss Agnes in
cyanide bottle.

I captured a mouse alive this morning
& put it in my big cyanide bottle. I was
surprised to see with what ease it
died. Several times it passed its
fore feet over its nose, & then lay quietly down
gashed once or twice, and was dead. I saw
its feet tremble a little, but there was
no struggle, or apparent pain. Little
bright eyes; if the head had been made
a regular motion in its own way I would
have let be.

I captured another mouse last night
& put it in the cyanide bottle this morning.
It was about full grown & struggled a very little
before it died. The mouse experimented upon
yesterday was not quite full grown & not so strong
as this one, & I suppose for this reason perished with
little ease. However, a cyanide bottle causes
death without much pain.

Monday June 17. Saturday afternoon I went up
the Hudson to Croton, to see Mr. Page. The
Croton in this country, in many of its common features,
differs widely from Staten Island. When
I get off of the cars I commence to look
at the great numbers of hemlocks, butter-
nuts & ~~chestnuts~~ growing by the road side.
This country of woods also abounds in chipmunks,
& the red squirrel as far as I know, and
accompany the birds.

A. sulphurea Along the aqueduct I found many grasshoppers.
C. viridifasciata *A. sulphurea*, *C. viridifasciata*, *H. phoenicopterus*
H. phoenicopterus & *Tettigidea polymorpha*, being plentiful. I have
T. polymorpha not seen a *H. phoenicopterus* or *S. I.* for
the past several trips.

Mr. Purdy has a large black dog, but
the beast acts strangely when it gets excited.
I got it to play actively, running after
a piece of wood & by & by he began
to lean far over on his side & seemed
to be unable to guide his movements
in this way. The poor fellow could not find
the piece of wood & it took him some time
to recover himself. I think, perhaps, there
is something the matter with his brain.

We spent the evening in examining an old
spinning wheel & experimenting with worsted as
to the method of working it. I also saw

Croton

something about "knotting hammocks & tying a
"weaver's Knot".

Turnpike Road

High bridge

On Sunday we walked along the aqueduct
down the river, across Quaker bridge & down the
other side of the river on what Page said was the Van
Cortlandt property. On this west bank of
the Croton there is an old "Turnpike Road"
now over grown with grass & weeds, the road
to Albany. High bridge connected it with
a road on the other side of the river,
but the bridge fell down about eight
years ago, & was considered dangerous for many
years previous. It was a lattice bridge built
entirely of wood & cables only being used to
prevent the wind from injuring it, they being stretched
up & down the river & fastened in the rocks. We
stood on the shore on one side, the river
being ^{about} a hundred feet below us, & threw stones
over in the trees on the opposite cliff.

There is a great deal of water in the
river now, so that it flows at the base
of these high cliffs. With the wooded
surroundings there only being a deserted
house in sight the old orchards & running
mill weirs, the scene is a beautiful
one & the Van Cortlandts & Underbills
have good reason to be proud of their
homestead here. There used to be an old

Robin

Large

Forest tree

will near here, owned by one Underhill, & we saw ~~an~~ ^{one} stone that was very likely used at the time. Some large trees grow here, one of which measured 9 ft 6 in in circumference, & there are also many imported willows ^{along the} near the site of the old bridge.

Lupinus

Lupinus grow in one place, by the well on the side of the Aqueduct, & Page showed me a small patch of trailing arbutus ^{near by} that he had found a year or so ago.

Trailing arbutus

Cat & meadow

mouse

Mr. Parry has a grey cat, that I saw on two occasions, during my short stay, coming home from the meadows with a mouse. One time I followed it into the raspberry bushes back of the house, & watched it let the little mouse go & catch it again several times. Finally she ate it, swallowing head, tail & all, it being young & tender.

Geese & chickens

When the chickens are fed, the geese go up & pull feathers out ^{of the} in great quantities, some of the chickens looking very miserable for the want of their natural covering. However, they are not frightened away from the feed, & it is comical to see a hen picking up grains of corn & narrowly watching a goose all the while.

M. bittatus

Melomophus bittatus is abroad. I also saw in numbers & captured a Melomophus of an unknown sp. (M. minor)

The following butterflies were seen at Crotan: Papilio
asletus, P. leucus, Pieris rapae, Colias philodice,
D. archippus, Argynnis cybele, Gnophos interrogator,
Vanessa atropis (just hatched), Pyraus ultrata,
Limnitis wola, L. disippus, Neonympha
euphyas, Lycama pseudargyria, A. numitor,
P. zulema, P. cernus, P. vna?, Eudamius pyroclades,
E. leucidas (one specimen) & E. tityrus. Saturday
night many moths flew in the open door
among them a small Calocales that I have
never seen before.

June 28th Sally Waters, the alligator, is gone. While
Sally Waters
the alligator
I was at Crotan they put too large a stone in
the vessel where she was, & she crawled out.
Sally was very unamused & seemed to reproach
me as one who gave her lots of meat &
wriggling worms. The first two or three times I
opened her mouth and put the meat in,
but this soon came to an end, and I believe
she opened that very important feature
ridiculously wide when she saw an
approaching worm.

This afternoon Sally was found in a neighboring
garden & brought home again.

The eggs laid by Hyperichia so on June
22 (page 370) hatched today (July 7). The ^{Caterpillars} moved
in a zig way up & do
of the bottle, one following the other very
closely in a "do as the leader does" way.
I tried them on white maple but they would
not eat it, & I have now given them cherry
(cultivated) & raspberry leaves.

Those fed on the cherry show the best
but perhaps was owing to there being fewer in
the box. The most amusing trait of the young
caterpillars of this species, is, the soldier's little way
in which they follow one another. I have watched them
walking along a branch, the leader turning about when still some
distance from the end, & all those behind uniformly followed that course
turning at the very same point.

In the following account of my trip to
Bel. Water Gap I neglected to mention many
things particularly in the plant line. The Botanist
made a list of over three hundred plant species
in the vicinity. Verbascum lychnitis grew
in abundance in place. It was also
the home of the white maple, &
on the hills a juniper grew, all
these, with the exception of a single juniper
on the peak, being foreign to S. I., in
this. It is all very unusual for the
area. Prior x stis obscure & latus

Delaware Water
Gap.

^{Saturday} On ^{July 2nd} (having these days holiday), I started
for Delaware Water Gap on the 7.40^{a.m.} train & waited
about all that day, putting up at night-
with Butler Poggendorf & Northrop, at B. & Broad.
They did not arrive until Saturday evening
& their train was an hour behind. ^{a.m.}

It was about 11^{a.m.} o'clock then I started for what
is known as the Peach Orchard, where a fine
view of the gap can be obtained and also
where there would be a breeze, for it was
a very hot day. Blackcap raspberries were
plentiful, & on the high hills a few rhododendrons
flourish were yet to be seen, though their time
had about passed. After reaching the top
of the hill, I lay down under a chestnut,
& might have gone to sleep if it had not
been for the large black ants that kept
crawling on me. Hence, I soon heard
Calamity stridently & got up to procure
a few specimens. - After this I used the
noise of some of the neighboring fields,
and had talk about Strasburg & the
rocks of the surrounding hills. He gave
me a drink out of his pail of ice water
which he said was very valuable on the
hill top, & I started for Brodhead's Cross,
which I could see in the distance. On
Brodhead's Cross I met a wood chuck that came

16
Crumbling through the woods down the
hill, but when it saw me it stopped
very suddenly, we regarded each other for
quite a time.

Betula nigra

I found the shores of Brodhead's Creek
very pretty with the hills rising sharply
on each side. The shore was sandy &
there was an abundance of Betula nigra,
the river birch, more than I have ever
seen before, we only having 4 trees on S. I.
that - know anything. Here I

Cicada
Epilobium

heard a Cicada & saw some large
patches of Epilobium which I had
also noticed from the car windows. I
wandered along the creek & across the
rather high & narrow bridge of the N.Y.
Susquehanna & Western R.R. to the other
side of the stream, when the Del. Lac.
& Western R.R. runs. Then I crossed the stream
again on a wagon bridge, & the surrounding

was very pretty, the rocks rising high
in one direction along the creek. Under the
bridge I found a board & near by
several springs out of which I got a
cool drink of water & then lay down on
the board & went to sleep, for with R.R.
standing on, I was quite tired. In one
of the Del. Lac. & Western R.R. piers, a phoebe had

Phoebe

built her nest & there was an immense
brown backed swallow flying up & down
the stream. ^{Probably a sand swallow} The largest spring of the
lot was under an oak tree the roots
of which projected there & I saw her over
it.

About 6.30 I went through Experiment
mills (about 3 houses & mill), & so on to the
R.R. station to wait for Bolton
^{was sent in some numbers} Enallagma cyathigerum & the mandarin

growing on the

The next morning we followed the
del. river to the mouth of Broadhead's creek &
so along the spring made. We
saw more of the swallows found a limpet-
like shell on the river & I captured a
number of grasshoppers. The weather was
warm on the river. I also captured
a dragonfly which was quite similar to
the one found on the river at Bolton.
I also found a Leucosticte campyloptera
feeding.

I found Eudras gularis &
the turtle Chelys insculpta, the last of
which we let scamper off among the
raspberry bushes where we found it.

In the afternoon we climbed Mt.
Miner, the mountain on the rocky side being
known as Mt. Ramsey & the whole river.

as the Hattiesburg Mountains. On the way
up we stopped at a small artificial lake
where Britton found a species of Proctos, which
had not been reported since this little pond
about half way up the mountain, on
a ledge of Medina sandstone, I found
a colony of grasshoppers the name
of which I do not know as yet. (Circotellix veniculata) I did
not see the species any where else on
the mountain. The day was very
warm (great mortality in N.Y. City) but the
clouds were more than repaid by the
fine view & the good ideas we got
of the geology of the country. Vaccinium
pennsylvanicum was very thick on top
of the mountain & we ate in fruit.

On the 2^d of July, we followed up the
ridge of hills where the "Peach Orchard" was
in places the path being very narrow with
precipitous sides. Toward Brodhead
Creek. I found two caterpillars of P. trinitatis
one on the sassafras & the other on the Juniper
tree. The walking fern was common on
some of the rocks. I found I could
make a fair imitation of the undulation of C. ...
by rubbing one of its legs on the wing cover.

In the afternoon Britton & Northrop, went over
to the ferry, then intending to spend the night in the woods
if we were unable to find, & I will soon send them & return
back to N.Y.

middle of the dusty road. The bird was perfectly well, or at least appeared so, for it would fly about with the others & then come back to the road.

I found the bird shot on the road this afternoon.

July 15th. I heard Protophaga aurigata this evening. Saturday July 16. Dr. Beutenmüller & I went to Clifton today, & walked out along the R.R. track until we found a nice shady place to sit down for it was quite warm. After that we looked for grasshoppers & made a list of the butterflies flying, which I have put into my little book of notes.

Field hunting. In an aster plant, around which a small smilax vine had climbed, I found a field hawking's nest with several large grown young. She was very quiet while I looked in. There were numbers of half grown young. I also found many some post-holes. I discovered many frogs & toads, among them Hyla viridis. These I brought home & have now in a glass vessel, and of the bright light in color.

I saw the following dragon flies; Tramea carolina T. trimaculata, Libellula bulchella L. mixta, L. mixta? L. quadripunctata.

Then I sit by the bed side of a friend that is
suffering from illness, or when I remember my own fortune in
the way of sickness. I cannot but think ~~about~~
how forcibly these experiences & their remembrance
guide our life. The consolation is
not complete until he has been well at
least once. We get a glimpse at
death, & when those little threads that hold
bird life ~~are~~ together are stretched so tightly
- right into breaking - he plays then some
solemn tunes.

And when
we get well again & wander afield, nature
never seemed to look so bright before,
but we are thoughtful - the brightness
has now another meaning.

Scarlet Tanager, July 1. The Scarlet Tanager still sings ^{afternoon} on the
same tree in the Harbor woods as it did in early
June. On the high I found about five very
curious caterpillars covered with a cottony substance.
Like that on *Erisonia*.

July 2 Several times of late I have seen an
Eng. sparrow sit up to the little pipe that leads
the water from the melting ice through the side of the
house to a tub out of doors, and get a drink.
Today I saw a young sparrow with hardly any
tail hanging ^{mostly} head downward & drink the drops as
they accumulated. The water in this tub is too low.

about 600, hundred ft away the serpentine
comes to the surface on the hill-side,
so we can get an idea how deep the
cut is in the rocks, & how much has
been filled in by nature.

For some time I have been looking for a
few new grasshoppers.

I only saw males of Elinobolus curtisii.
A shrub of Dismodinium (grew in wet place)
was in bloom, & also to smell a trace of the
mint.

While waiting for one of the storms to
go over I sat in the piazza of the
deserted La Bau mansion, & inspected the
stones in the wall of the house. Then
were drift rocks of coral shreds, & it would
be a good scheme for an owner of such
a house, to have the stones in his wall
labeled. Then were two or three granites, soap,
green soap & several large stones & several stones.
The water gushed out in a torrent from
the spout leading from the roof, & I pictured
to myself all the people whose lives that water
would have saved, landing or else the
silted trees on the steep bank, in front
of me. I doubt if the house would have
held them out. The house did
not take the water in any way.

After a month being away from the city, the water in the creek had reached down to the bottom of the bridge, and had many others in Stephen and Catherine's neighborhood. Many of the houses were submerged, which is about on piles over a foot, and occurred in the middle of the night. The water was so high, it was washed away by a sudden burst of water from the brook. The force of the water threw the house into the air, and it was blown out of the building. I was with great difficulty, John Wiley and a young companion rescued them. They swam out of the water, and were blown into the front window, and carried the top of the house out through a rear window. The Leathers lost all their furniture, when was swept away and carried down the brook. The water in Washington park, stretched out for miles, and carried away the houses and others. The water ran into the barroom of the Continental House, at Water and Bay sts., and the tables and chairs floated out on the street. For many hours the water was so rapid, that it was impossible to get a dangerous washout at New-England and another at the south side of the tunnel at Tompkinsville. Last night travel was delayed on the road, as the trains were only able to get to the creek, and back again, by ways. Several hundred men were put to work to repair the damage on the road. The water swept down Vanderbilt-ave, at Clinton, washing away the pavement and sidewalks and flooding stores and others. General O'Leary's regiment was compelled to wade.

Two bridges on the Harmon Railroad, between Hildale and Careyville, were washed away by the flood in the morning and all traffic was suspended on the road beyond that point. The Harmon line, which runs from this city to Hildale, was caught between the two washouts and for a time was unable to get either way. The washouts were several hundred feet long and it would require two or three days to repair them. It will be recalled that the passenger train to sand dunes, through Hildale today, there were only a few passengers aboard the train. One of the bridges is badly damaged. Many fences in the neighborhood were washed away. The effect of the outbreak at the Harmon Station said last evening that they had received no particulars of the washout.

near to me, when facing about they raised
the storm in their tails first

The sun came out in a while & I left,
but soon it rained again & so fast & long
that houses & gardens ^{in low places} were flooded. I saw
some places in Staplehurst, as I walked along the
hill, where only fences were above water &
the houses had the appearance of floating
on it. There was one very little garden
that I noticed in Tumpthorn which in the
evening that was entirely flooded this afternoon,
the tops of the beens being just above water & the
cows mostly on land.

Long. Sparrow

July 6. I saw a female long sparrow feeding
a young one today as I suppose this must
be brood no 3. The bird, by first flying
on the wall near the young bird, & then
as it is a peck time to get the little one
to follow her but all this with numerous
calls, was ~~was~~ in vain. It was repeated
six or seven times probably for the reason
that there was a cat in view, & which
eventually I saw catch something, probably a
sparrow out of its own nest.

Ring birds

These birds were in the garden this
last, but they probably all represent one
family. They came about ten days ago.

Chaffin

The chaffin that came in the spring, is still here.

Orchilimum vulgare is plentiful in the fields
than the orthodox summer roach, the kind
we associate with the river.
July 27 *Eucanthus minus* has arrived that is, is
stimulating.
~~have been for a few days back.~~
Toads are singing yet.

This has been a summer
of great-thunder & lightning storms. It has
not only killed several people in S. I.,
but the lightning has damaged & destroyed
many buildings. Yesterday, at about half
past five P. M., I was sitting near the
window talking to my Aunt, when a
crash of thunder made both of us jump
several inches from our seats. Shortly after
there was another bang nearly as bad. The
first of these struck the Church across
the street, only about 200 ft. from where
we were sitting, leaving a portion of
the lightning rod. There was also a flag pole
hit in the village. At Pleasant
Pleasant Plains, a Church steeple was badly
splintered.

I saw two ♂ sparrows (Eng) have a fight today. They
came to the ground locked together one falling on his back
& the other standing on him & picking him as hard as he
could. I thought the unlucky bird would be killed but he
finally got up & after a few more desperate charges at each other they
flew away. Quite a number of people stopped to look at them.

Saturday July 30th. The observance of the half-holiday
is becoming quite the proper thing
it helps me a great deal, & permits
quite a ramble of a Saturday afternoon. However,
I did not go out today, as I thought it would
rain, but I was mistaken.

In the garden at home, in the hottest of
the afternoon sun a ^{male} Papilio philenor was
flying in circles between the house & the
grape vine, now & then alighting on a leaf
or visiting a nasturtium flower. There was
a decided Vanessa antiopa, with wings
much torn, but ~~was~~ full of energy, &
would go through strange revolutions
in the air with the gay Papilio. I watched
this little butterfly for over an hour,
& left it still flying up & down in the
sunshine. A specimen of Linnaea would
visit the spot now & then, and
sport with the Papilio; and ~~on~~ the west
was a ~~deformed~~ Graphis. A very
fanciful story, I think, might be wrought
concerning a butterfly that had gone through
all its changes, escaped the perils of
innumerable birds and numerous other enemies,
and finally broke the chrysalis to find
its wing crippled & itself unable to fly.

It
might be made to illustrate the uncertainties of life

if

shook

On a ^{red} maple tree in the garden, there was a
Rhyssa hirsuta which I disturbed before I saw
her, & caused her to fly up into a pear tree.
Then it ran its antennae through its fore legs
several times & after the work was done, the long
ovipositor was passed between the hind
legs, the body being in a far back position
to bring it into position.

Pantata

I captured, about dusk, a specimen of Pantata
flavescens, the dragon, that is distributed
over most of the world, where dragon flies
are to be found at all.

Tom cats fight
rooster joins in

The people living opposite give an interesting
account of a fight between two tom cats.
They say the two tomies were engaged
in no form of no mean order, the people
on the two piazzas and the chickens in the
garden being witnesses to the struggle. At
last one cat getting the worst of the battle
with teeth & sharp nail, a rooster joined
in and stopped the fray, the other
cock crowing loudly by way of applause.

~~Philopon...~~
This was a Tropical
kind of a day with
cloud with mist. There were many

butterflies flying and a second brood of
 Popsie's turner Papilio turner abroad. Cuckoos were particularly
 abundant & singular - it seemed to be
 a sort of holiday of theirs. I was heard
 a great many. At noon I climbed into
 a tree near the highest point of Sabino Is.
 to eat lunch. For the mosquitoes were
 very thick on the ground. While I was
 in the tree a Cardinal bird came and sang
 in a dead tree near me so that I could
 see him plainly. All this season the
 bird hunting color is not yet out. Field hunting
 is however and there was an old man singing.

1887

hills and in the brooks, in any previous years at this time. Brown thrushes are still feeding their young.

Aug 2nd. During some of the hottest nights it has been no uncommon thing to hear Cicada give a very short 3-ing. Perhaps they are drawing & are impatient for the sun to come again. Aug 4. I found three Cicadas together in a pear tree this afternoon but was unable to observe the eggs.

Aug 4. Katy dids (*Cyrtophytus carcanus*) are now very plentiful in some places on the Island. At Mrs New-Bridgton I heard a great number & it was said that they had been stridulating for about a week back. The common toad is still singing. Saturday Aug 6. Rains this afternoon.

This morning I heard an extra squeak. When I went to feed my mice, and upon looking, I found that there were some more young. I do not know how many yet. The singer has been singing a great deal of late, and is afflicted with a sort of mange, and the hair has partly come off of her face.

Sunday Aug 2nd. There has been a north wind ^{blowing} blowing all day and a bright sun so a better occasion for tramp-
ing could not have been ordered. I went to Prince's Bay and on to the country about Rosville.

Grasshoppers

I captured two more grasshoppers, & I think one of the latter is new to the island. Also a few warblers; the so-called Fall form of Asph. sulphura, Spharagemon collaris, Prinidia anceps, P. melanorhynchos, Chondestes maculipennis & a Melanerpes. S. collaris & the Prinidias have not all developed yet (most of those I caught had nearly shed their pupal skins) and I found a few pupae.

Grasshoppers
it was

Several specimens of Eudamias ^{lymus} were flying about some small leaved trees on which I observed two larvae about full grown.

Butterfly and

The butterfly weed is still in bloom. I saw some on Sat 2 when I went to Del. Water Gap. Cassia & false indigo are abundantly in bloom, and the pepperidge trees that stand in the water, are turning crimson. Many plants are now nearly ripe, and berries abound.

Cassia

False indigo

Pepperidge

This day I climbed up in a Q. obtusifolia.

line to our house & found a new world
but I did not have a mosquito net.

1886 Aug
Lansdale

little white mumps run about under the
tree & I saw Peris lisa, many other
butterflies flying over the H. d.
& other common ground plants. I saw
one here. I saw a lot of
flies of other species, & I think they
are the striking stones of the house
flies. They were not very numerous but
these stones were in places of some
other thing to the house flies about
four hundred feet apart. The stones
were of a white & yellowish color, some
were to be seen the surface of an animal
bone. The other had the bones &
something wrapped in a cloth, which
I did not disturb.

1886 Aug

I met a tall young fellow, that was
singing in the church at home, &
we had a long talk together about nature
& the ways of life. He had lost
all the fingers & the thumb on his left
hand in a government saw mill, in Arizona
and was allowed a pension of \$30 a month.
He had worked about the fields in the
neighborhood since last March but I

1887

said he was thing very tired of it
"it was death for our nation young folks
as there was nothing to shoot." I advised
him to look after the woods - but
but he said one must have a
can - and we do to become interested
in such the work

Parula flavescens seen once

The m - - - - -

mainly

July 7 I captured a ♂ & ♀ of the so called
chickadee from Parus in a tree
high up by the road side. There are
the bird. I seen this summer.

Baltimore and I hear Baltimore Orioles again in the morning.
The about Yesterday I made an investigation of the
singing mouse mouse nest - & the mouse question in
general - I found five young evidently five
or six days old. That is they appeared much
larger than the former young of last November
one of which is the father of the present
family, the other one having been ^{partly} ~~partly~~ ^{partly} ~~partly~~
by his mother.

I remind the family to another box,
I will watch with interest to see if the
^{young} are removed for this reason.

Aug 10. I have seen for the first few
White-bellied daisy swallows flying over head. These
swallows? Just like the white-bellied, but
I have seen the latter ^{as it} sitting
on the telegraph wires ^{and feeding} after the
manner of the species.

3. Saturday, Aug 13. I went with the
U.S. Assoc. for the Advancement of Science
up the Hudson river today. I saw many
of the chief scientific men of the day
I spoke to a few of them. At one
of the receptions lately, I saw Dr. Abbott,
picking him out easily, in the crowd
by his odd shaped head which I had
^{noticed on a picture}
The party stopped at Poughkeepsie & had dinner
at the hotel, after which most of the
people went to West Point (about a mile),
but a few of the botanists visited
Old Fort Putnam, the one that
remains. I accompanied the
latter party. We had a pleasant walk,
the view of the river & surrounding
country being very good from the
fort. I saw a tree ^{that} was new
to me growing in the fort and
also a vine down by the river. They
called it Vincetoxicum. We came home
on the West Shore R.R. & saw ^{a very good} Hythum growing abundantly.

1887

Sunday Aug 14. Went to swamps -
but the mosquitoes were so thick that
I could not net a minute, except I caught
a few. Conocphalus robustus & Wata benedicti
sticticus ^{was} found for the first time this
season. Limnitis secula is one of
the most abundant butterflies this summer.
Libellula semifasciata, L. quadripa, Pleuriscia
trima & Diplax berine were observed.

Marsh warblers

I think it is quite possible to catch
a marsh warbler in an insect net
they fly so near, while scolding, as
one passes through the high tide weed.
I made several efforts today not for
the purpose of capturing but simply to see if it were possible.
If I had had a starter rim to my
net, one that could break down through
the bushes, I might have had the
pleasure of letting the little imp go
again, as it was, however, it escaped
between the numerous stems.

Heliconia

Heliconia

Heliconia

(see above)

Heliconia moscheutos is abundantly in
flower now, as is the purple one. (Spina)
Heliconia secula was flying & was one of the most
specimens that I collected to capture & examine. However,
the mosquitoes were so thick that I was
incapable of stopping to examine - was accomplished
the net I used. They were about as thick
as the net I used - the net I used - the net I used

Swallow

July 5th I had morning with a few days of
rain falling. White-throated Swallows flying over.
This afternoon I noticed the swallows still flying
about.

The Naturalists & Entomologists of the
New Association met at Sandy Hook today,
and we had a very pleasant time.
Beach plums are not ripe yet in the
hook yet. I the very good ones at the middle
two weeks ago. In the evening I had
a long talk with Dr. C. C. Abbott about
birds & plants. He would let me be
in no harm to leave & I am very pleased
and will proceed to listen & tell of
my own experiences. I also had quite
a conversation with Mr. Fisher & my old
friend J. B. Smith. In this series all I
will say of the association meeting, I
having been in the same position
for many years.

Aug 10th Tonight I found two specimens
of what is probably Orchelimum concinnum;
one (♀) sitting on a grass stem & the other
(♂) on the top of a leaf. Their
undulation is something like Che-e-e-e, etc.
I watched them for a time & then with
great care & without making any disturbance
put the ♀ in my bottle, etc. & then

about two ft away. Though I waited some time he did not strut again, evidently that something was wrong with his mate. Saturday, Aug 22. It was dark & cloudy today, but one time a few drops of rain fell. The pear leaves in the garden are falling off, some brown & some yellow with brown spots. So the Fall is on.

Signs of autumn

The grape vine that grows over the well has now a few grapes turning.

White bellied swallows.

I went to New Dorp Station on the R.R., & walked along through the woods home, seeing hundreds of white bellied swallows sitting on the telegraph wires. I also saw swallows flying south this morning. The leaves on the big paper birch tree at New Dorp are turning color, and I think this will be a beautiful autumn.

Melanophes

I saw a *Melanophes formicivorus* that had just cast its prepupa skin, hanging to a weed (Aster). all white & limp, but drying out.

Field hunting.

I heard a Heron & a field hunting song also many Cuckoos call their note.

St. George's lake swamp

is growing in

are from one of the swamps. Picked up mud in
in flower. In a swamp near the water house

1887

Cophus

got more born of *Pipilo heterophyllus*, & I believe being the most common.

Cicada like

I think that a Cicada can make two distinct sounds though probably they combine them usually. I had one in my fingers today, & found that one after the other had been produced with a pin, that sound could be produced. Before I captured it I watched it closely - as it sat down & when singing loudly it would move the abdomen rapidly up & down. I finally let it go thinking that old Cicada had had a hard enough time of it; & it flew high in the air out of sight. They have been very plentiful this year.

Mosquitoes

The mosquitoes were thick in the evening when there was no wind to keep them down, & I shrank up & would try to get out of their way for a time. Up one of these trees a tree. I saw a *Psocoptera* *littoralis* resting on a leaf. I searched in these trees for perfect leaves in a perfect leaf, but I was unsuccessful, they were being slightly defoliated & diseased or eaten by insects, so of all these kinds there were none without blemish. How little ^{then} should we expect to find a perfect one, when leaves in all their wildness are

Psocoptera

discovered ~~in~~ ⁱⁿ ~~the~~ ^{the} ~~forest~~ ^{forest}?

W. H. Apple

I discovered a seedling apple tree, under which hand some beautiful red and apples. Probably ~~no~~ no one knows of this fair little tree, & with the exception of the squirrels, mice & crows I am its only visitor. My old friend, friend that has charge of the LaBare property, tells me that the crows pull all his pears off.

L. W.

Sunday, Aug 21 I walked out in the clear valley & spent my time partly there and on the surrounding hills.

I did not see a great deal though the day was pleasant & I am sure it was

Birds shedding my fall. Many of the birds have lost their tails now as they are shedding.

land
yellow-throat
Quail
wild pigeon
I saw a Maryland - yellow throat that had a feather left in the way of a tail. I heard a quail & saw what I took to be a wild pigeon. I have also seen a few crows lately.

crows
In a field three crows were catching grasshoppers & I watched them run one after the other for some time from a tree to a tree.

Burrage

The ~~stems~~ ^{stems} of the sassafras are very pretty now. The stems are red, the fruit itself a dark blue & ~~ing~~ ^{ing}, where taken out of the cups a dark spot is discovered on the end.

Sept 2. I let all the wire out of the
trap and let it go. That one of the
traps had been closed. I saw it was
closed first. The bird was then seen
a good deal & came in about the same
quite lately indeed. There is one that
is a little smaller than the other three
& not so swift. It is the runt of the
family.

It is interesting to watch the
table. It catches grasshoppers & crickets;
to look for them with her fore paws
in the grass. We have a visit now & then
from a neighbors cat, having a white body
& black or dark gray tail, and this
pretty cat is my only rival in the
study of the Orthoptera in this
vicinity.

There has been a Gnathochlamys
strabus stridulating in the garden for
the past few evenings. G. dissimilis
also present. G. ensiger gone.

Sunday, Aug 28. I went to Crocker's Pt. today
& spent my time on the meadows, & the
swampy ground approaching the Point.

As I left the house at 7.50 I heard
the stridulating, though the
sun was shining brightly.

1887

that contained the insect. I drew most
of the metal using a Göttingen anvil
so to remove, but I do not know if
a stone shall be not substituted in
the tin line.

Among
Pterostichids is probably given to start
between the same in living stage as
the case of the genus. I found
later that the structure though not
I did to the ground using the same then
when to touch with another, lower
than any. Of a number I appeared
with today, as each may. I continued

to examine a number of specimens of *C. cit. rous*
and even some from example. The
structure consists of the same ill-
it only, as in *C. rous*, but
it is very slowly marked, not
as in *C. rous*. I had to take off my skin
to turn it up in a season, for the
first specimen I found it. I had
I found a few others than changed
in the course. One of the
in the same little. I have used
to substitute in my hand and
when it was in the mouth of
the beetle, the I had put it partly.

Flying squirrel
dead.

Monday, Aug 29. My flying squirrel
today, being two years & four months old.

I held her ^{by} body in my
hand, so soft & face so pretty. I was sorry
to ~~bury~~ her. I have never had a
more charming pet & certainly never one
so tame. We had a contention every morning
she trying to get out of the cage - when
I opened the door, & I endeavoring to
keep her in. I was out always victorious.

In the winter time I would let her out
in the evenings, & she would play about
the table or sit under my coat, from
whence she would peep out now and
then.

Occasionally she chattered a
little, but though we lived each other,
I never was able to tell what
she was saying. She often
told me I gave her something
to eat.

Looking over what I have written I find
it does not explain the room I meant to
occupy.

Aug 29. Exercise of the animal on some new wood on some structure of

Some of these insects had lost a hind
leg and the scar had healed,
leaving a little.

I also was waiting for them at places
near the locality, but probably
because Orchids were scarce & I
kept down a low color. The crabs
on list, I saw one which, would
not call very low so frequently that I
could not stand still.

Along the shore by the side of the
Unknown cricket house leading to the shore, & in the
Anaxipha high tide bushes we discovered a
new species of S. I. It was very light-
colored, but little captured
from the bushes, but all the same I
of that escape. It was a position
of the shell, and it was the
same as the one I saw, but I was happy
over the fact that the little crab caused
me to be so close to the life but
lost it.

White bellied
swallow.

The white bellied swallow was, in numbers,
hovering in the low, low bushes, & the
monarch butterflies now & then came
a piece of sea weed, or other object con-
tacted by the wings.

Danais

Chrysomitris hatchling. Lately we have found two chrysalides of *P. rapae* when pursued by one the no further in the garden & I, to the the open meadow I did with ease but this time. These both hatched in a few days.

Aug 31 '87. I have been in the garden of course and working as usual, & today a fine day in the garden.

Today the very hot sun has left the sun, I thought yesterday. *Phryganea* *hyalina* is in the garden.

Left the garden in the morning and went to the garden and the garden. The garden is in the garden.

The garden is in the garden. The garden is in the garden. The garden is in the garden.

Today the garden is in the garden. The garden is in the garden. The garden is in the garden.

Today the garden is in the garden. The garden is in the garden. The garden is in the garden.

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Today the garden is in the garden. The garden is in the garden. The garden is in the garden.

There were some old people here, but I did not see any of them. I saw a few of the old people, but I did not see any of them. I saw a few of the old people, but I did not see any of them. I saw a few of the old people, but I did not see any of them.

The mosquitoes were quite thick near Brooke Pt., where I went to look for a female of the new kind of *Culex*. I discovered tail-broods, when they were not at all troublesome compared with today. I succeeded in capturing but one *Culex* on that; it being the only one I saw and the *ovipositor* is similar shaped. I caught six males, all of them ^{as} I remember being on the banks of the "high tide" lake. I saw six in. to one foot long. The *ovipositor* I have in my pocket for the little *ovipositor* found in the water. The *ovipositor* is a small one, and the *ovipositor* in which it was *oviposited* was not so large. I was half way in the water when I saw a poor little creature, I found, when I was near it for its body, *laying* down with both hind legs *up*. The *ovipositor* was very tender & I had lost a leg before, the water was *advancing*.

... One of these trees - a giant,
16 ft. - 9 in. around, with eight large
branches which bent out far from the trunk.

I notice that the ends of these branches
stand about three feet from the surface
of the swamp always turn up again, & grow
"horizontally". In the branches of this old
tree I could lie down, & there were
numbers of recur seats when one could
shift - side to side - in a
easy chair. I remember, I read
some pleasant poetry that I had brought
along, & I watched the high holders in
the tops branches, & a fish hawk out-
over the meadow towards the sea. There
was a low land for the sea
... for they live an unobstructed view
well as we. I am not sure as to the
species of my willow yet, but it may
be *Salix*. The

probation next time. When I was
young they would have you know
There is a little monument at the end
of the road leading up from the church
to the old house. It is a little
stone monument.

Bened to the memory of Mrs Anne
Walt, Consort of Joseph Walt, and
daughter of Susan and Peter Barlow
who departed this life October 5th 1828
aged 36 years, 4 months and 14 days.

Her life to virtue and religion given

Her death to nature, her soul to Heaven.

Bened to the memory of Abram Burdack,
who departed this life May the 12-1822
aged 77 years 1 month and 22 days.

You living men as you pass by

As you are now so once was I

As I am now so you must be

May grace prepare to follow me.

W. L. Burdack

In memory of Anne wife of Jacob Burdack
who departed this life October 1st 1828 aged
87 years 2 months and 14 days.

My flesh shall lie in the ground

Till the last trumpet joyful sound

Then bid the claims with me to be

And in my heavenly home be free

Blessed to the memory of Jacob Burbank
who died Sept 14, 1854 A 83 y'rs 5 mos
& 5 d's.

No tomb has eath' to his grave
No stone is set in the Lord,
Who know the Redeemer can save;
And live on the faith of his word.

While ashes to ashes - and dust -

We give unto dust, in our gloom

The light of salvation we trust,

Which hangs like a lamp in tomb.

Blessed are the dead who die in the

Rev 14, 13.

In memory of Lucy W. relict of the late
Jacob Burbank - who died Nov 16, 1865
in her 87th year.

Blessed are the dead which die in the Lord.

In memory of George E. son of Jacob &
Martha Burbank, who died 30th Dec.
1834 aged 1 year, 6 mos & 3 days.

My loss my babe is gain to thee

My ~~loss~~ blood, but thou art free,

From sickness, care, and racking pain,

We're parted but we'll meet again

Wm. W. H. 1865

who died April 19th 1841 at 71 years, & was
23

Here rest my oft divided heart -
Trist on thy God, thy Saviour, rest -
When with the world, would given to part.
When called on angels food to feast.

High heaven that heard the solemn vow
That now renewed shall daily hear

And bless in death a bond so dear

Then why lament - departed friends

Or shake at death's abode

Death's but the servant - Jesus sends

To call us to his home.

From the highest point, I climbed into
a redoubt - bringing me of the
better things, & a view of the
mountain. The mountain of promise
looks round yellow & white trees
& I noted that the pointed
hills looked as white as snow
as the water down the side. I was
glad to see them without their
sides that I was looking over.

A red-eyed vireo came close up to me
in the tree, & I also heard me

There were also white-eyed vireos, cat birds
and two thrushes, and a white & black bird
that flew over so gracefully that I could not
fairly view it.

Then on large flock of robins now, I saw
the first in near Lake as
days ago, a lot of them. They
can be seen this Fall on Staten Is. & Long
Island, but not elsewhere in the state.
Poor birds, raised in the orchard, but near
the farmers' house, perhaps, used to mean &
barn, but to be seen over white musash
hanging near the house.

I think I captured a new grasshopper to
the flock, but I haven't seen it yet.
The narrow-bellied *inmarophaga* *multifasciata* is now
in the air, but not, like so plentiful as
it was. It kept flying in circles about
the

Sept 9: I saw an *Amantia angustifemoris* that
had just lost its pupa skin a short time before,
engaged in eating it. It seemed to be
partially full of the former, at least it was
eating that portion of its former self, & I
saw a remnant of one of its legs still to
the ground. Though it ate with a sort of
method, yet it was not at all saving of the material. It
a large piece, as have others.

Saturday, Sept 10. I went to capture, and find many
of the grasshoppers that I found in some of the
hill sides east of Merriam's Valley on the
8th. I discovered them in the same places.

Weta.

The prolegs are coming out. I heard
about as many as in spring time.
They are also some woodpeckers & a few
small birds flying about.

Red-bellied

There are many birds flying over,
and I think there are some prairie falcons,
as far as I know. Very new & then
the water is not any more ~~under~~
from far over your head.

Red-bellied

There are these kingfishers about
of the 4th or 5th now. They are
very active, flying after one another up
& down, chasing them. I saw two
more about half a mile away, and
the woodpeckers flying in the air, also flying
after each other.

It is probable that the forest - one in each
are had a pair, but I saw neither &
all of them were fresh.

P. brevis

Weta

Weta

A great many butterflies were
seen. P. brevis for the first time this year.
I think I have captured Neomachilis before,
if so it is a new one for the region. I
also captured a pretty Aermycla on a live beetle &
I think it is a new one for the region.

1887

Sunday Sept. 11. The white-bellied swallows
were flying south in great numbers, in every
morning.

I went to Matchoque vicinity; this day
however, being a dark & gloomy one.

Coccyzus erythrophthalmus

was also in some numbers.

Rhus glabra was plentiful on
the borders of the salt meadow. They hop
very fast when disturbed, I often times
looking to see whether it was a mouse.
Marsh mous are still here. I saw two
red-headed woodpeckers, and watched
them for a while.

One other I think Aster spectabilis

now in flower. It grows on the ground where there
is a little woods remaining. It is a trifle
larger ^{than} the New Eng. aster, that is the flower is.

I explored a new tract of country
west toward the Pumpkin road, but
the clouds getting very black, I started
for home, arriving just before the rain.

I have been sometimes seen to see
some of the seeds out, then bring ^{one or} two in a case
by which they are attached
shrink in the air. These globular masses of
seeds like a pin-apple, have quite the odor of the
apple buds.

Saturday, Sept. 10. It was cold this morning
with a north wind. It got warmer
in the middle of the day, while I
was something joyful about Malchoque
thru the woods to the Turnpike
road, and back again to nearly the same
place where I was in morning.

Prin. macrorhynchos was flying over a sandy
waste, & Melanoplus collaris
was plentiful in the same locality. This was
near the N. W. end of what we call the "long, low
lane that has no turning", for it is a remarkably
long & straight road without any others crossing it.
Very near this locality I saw several specimens
of Cicindela modesta & captured one. This insect
has only been taken previously on the plains, as
Bathurle.

I explored some of the same country that
I visited last Sunday, & finally found myself
over by the Turnpike Road, coming out just
opposite the water co's engine house, past Bull's Head
Houses of the houses are old & simple.
just then, & it always gives the true impression
of a long settled country. The Ridge way house
is close by. I found the trace of an
old road with large trees growing on each
side & the number of oaks & sweet gums
was noticeable. I lay flat on the

ground in the sun shining, calm breeze, &
watching them. Nearby was the large Japanese
tree that I found last fall; what few
leaves remained on its bare branches
had ^{turned} a rich red tint. Ah, such day,
a warm sun & light, & yet a
subtle frosty mingles with the distant
fog.

I lay down in the grass & watched some small flies
"dance" in the air. They would keep
up their aerial waltz for about two minutes when
all the flies would settle down in the grass
& after a while they would "dance" again, for
a few more minutes. The entire company.

I had a few persons near that were good
the birds were feeding some of them off (I
saw marks & cuts in their sides like pecks from a bill)
& they ripened in the ground. However, great
vigilance is necessary when choosing persons
at this season of the year.

As I walked along a road, watching a
red-tailed hawk & the many high
budders, I met a man and a boy, each carrying
a gun, & they inquired if I had met
a wood pecker down this road. Crafty they,
I believe it was the wood pecker they
would shoot, & he was afraid that the hawk would
see my eyes.

Woodpecker

Cynophylax
cynix

On the border of a salt meadow I heard Cynophylax
cynix stridulating, & after ward captured the
insect - to make sure of the species. I have
not heard an cynix for several weeks
past & I had thought that they were probably
all dead. They therefore span over a period
of two months in the perfect state, though
there late days are an very few.

white

In a little piece of wood, between Walchoque
& Chelms, there are several large white Birch trees.
I measured one that was three ft in circumference
& the others were just as large.

Sunday Sept 15th 1889. To Tottenville and vicinity -
today, the weather being all that could be desired.
On the Point, there was a very large fish flying up
& down the side of the dock with a fish
in its bill undecided as to where to eat
it, for it was so large that I don't
think it could have swallowed it. It
finally flew away & I did not see where
it lit. While my companion was on the shore, I
climbed up on the bank & discovered
quite a cluster of ~~xxx~~ "knee high" blackberry
bushes. This species had been reported from Tottenville
before by Britton, but ~~and~~ he did not know where
he found the specimen, & it evidently did not
come from this very noticeable patch or it would
have been remembered.

Three black blackberry

Crataegus

On the Point (hills) the Crataegus coccinea that I discovered several summers ago, but was first identified last year, was in fruit, indeed these wild apples were very beautiful. The name indicates the color of the fruit which are of a deep red, just as vivid as the seed cases on the rose bushes.

Anisobolus

On turning over a board I discovered a species of Anisobolus maritimus, the larva that used to be so common, before the loss of the R. R. on the shore at Camp Washington. I was glad to find that it still inhabits our island.

Wild grapes

On the near Richmond valley, we found some wild grapes in very good condition, one vine being purple and the other ^{grapes} white. There is also a white variety of this species. They were very good, the purple variety being much the best. The pumpkins & squashes in the fields gave them a pleasing appearance, & I little to look at them. They are of queer shapes & then too it seems a sort of wonder to find such a large fruit fast to so small a vine. Very delightful indeed in the pumpkin plant to lay up such an immense store of the good things that mother earth has to do & bring.

Prunella

I caught a few Prunella, but was particularly interested in watching the actions of Prunella maritima. A

numbers of individuals were gathered about a
 Cassia plant eating its leaves that lay
 partly on the ground, or sand. Sometimes they
 would run a little way after one another &
 often they would not touch one another
 across their wings as far as I could distinguish
 no more. *P. fenestratus* = *P. succinea*
 much fully with the group, & was well received
 they were not

I saw two bay weasels, *S. ermine* are crawling
 into a hole in a fence & the other again
 a little of the face, & the other. This latter
 specimen I ~~examined~~ ^{examined} it ~~flashed~~
 and basking in the sun. Finding
 it could not move, after a very slight effort
 it ~~disappeared~~ ^{disappeared} a foot or so. I was
 surprised to see come out of its mouth
 so easily. After this it could have made
 off very rapidly but I found it by the tail
 & examined its teeth as carefully as I
 could by holding its mouth open. It was
 quiet & did not struggle ~~much~~. The toad
 in the mean time, had recovered himself,
 & was sitting on the ground after the manner
 of toads. I pulled down the toad down
 He was a Jonah among Buzos, & he
 had good reason to be very thoughtful,
 which I suppose he expressed in the kindly

Chrysopsis is in bloom & with the purple & yellow *Gerardia*. (the golden rods being understood) forms quite a feature in the wild flower display.

Swallows

Sept 20 Swallows in flying shells, high in the air. I could not see which species it was.

White-crowns

Sept 21 White-crowns flying in y. down southerly

Swallows

Swallows
Day, cloudy

September 21 I went to Old Place this afternoon to see how our the d. progressed with the R R to see what indirectly will have been the result. I saw the house made of stone & plaster.

White-crowns

White-crowns shells mixed with crows, a little one. Perry also perched on a so d. dune. The inner had asthma badly. & that too not, relief lay in walking near the salt water. So he built his house, where with crows & shell, he had water on three sides. He is in ex-ecution of some religious paper.

March

March 21st along one of the elevated walls on the meadow, I saw a marsh wren just a foot or two in the weeds, not over a yard away. I potted him out & when upon the wall he disappeared between two of the plants, down to the weeds again. It was quite funny to see the bird go through the wall for it would have been so easy for him to have jumped

off the side into the mud, as about
any other bird would have done.

Sund. Sept 25. I went to Perastina
250 down to New York, walking the way
I went, with numerous detours (in the vicinity
of New York) quite a number of miles perhaps
longer than the direct route.

Junco *Junco* are now in bloom; I saw two
Cardinalis *Cardinalis*. The cardinal *Cardinalis* still continues
in flower, & the autumn *Cardinalis* have
appeared. I captured a *Hesperian* that
looks like a new species for the Island.
It was flying on the sand at Vaucluse.
Nemobius I saw two individuals of *Nemobius*
villosus having a fight, and all the
while they kept up a constant stridulation.
Neither one appeared to be at all injured
they nearly pulled one another about a
little.

I visited a few new lanes and by-ways
some very pretty indeed with the ripe
grapes hanging in ^{grapes} clusters on the old
fences. We saw some choice large
black ones that were the best I have
eaten this year. I found others later
on, but they were not so good though.
The grapes were very close together on the
bunch which always makes them taste well.

A cow came I sat down by the side of a hay stack,
where I could get the most sun, for it was
an odd . . . , & proceeded to eat
my lunch. I could see across the
hill to the brick works near Horsville &
also in the direction of Ludlowville. But
the object of most interest in all my view
was . . . , that stood under a tree,
mildly smiling me. After a little while
she came out to where I was & looked
her nose over my box, & investigated it
in possession. She looked brown-bird &
I gave her some but without creating she
would have eaten all I had - & sent me
to eat the . . . adon She went among
the stack Long time that I was there
perhaps a now's dead belly, frightened
when she saw me from the other side.
If never in about 15 minutes she
looked up & saw when she was feeding
& see me me still sitting in the sun
regarded me for a brief moment &
then went straight way to see me.
Her rubbed noses again, the kind
"gull" - browsing cow"

So far I have seen Catbirds, many kind of yellow throats & wood thrushes
are still here, & snow birds have arrived. I
saw a great number of jays in the front yard
of my cabin - & every one of them was seen.

squaring the woods a very populated one.

On Sunday Mr. Stearns & I walked about 15 or 18 miles through beautiful South Orange & over first & second mountains. I have never seen any finer display of pretty houses, & over first mountain the country also was to my fancy, as indeed any real country would be. We went up into our pasture on second mountain, where there was a cow eating wild apples (*Crataegus*) in spite of the thorns. I had a good view of the broad valley beyond. Chestnuts were ripe & I found a few but many that lay on the ground had been partly eaten by squirrels or mice. Two land turtles were in the moist bit of woods; one a ♀ with ~~the~~ gray eyes & the other I think was also a female with reddish brown eyes. In this latter specimen there was a very slight depression in the plastron that makes me in doubt as to the sex. Near the turtles, there was a black snake running himself, his den being close by in a pile of stones. I, however, grabbed him by the tail before he got all the way home, but he gradually slipped into his stronghold, a place that he knew better than any other spot in the valley where he was.

Chestnuts & squirrels

Land turtles

Black snake

1887

of the walnuts in general, & I see many more
that I do not recognize.

nut

Chestnuts

Walnuts

This is but a poor year for hickory nuts
almost as bad as last - though chestnuts are
in great abundance. Walnuts appear to be
the most reliable crop, & I am always able
to find all I want. I lay in my
back in Woodport Valley looking at a gray
squirrel & two hairy wood-peckers, and looking
to the walnuts fall. As each one
fell it impressed me strongly, as if some
great fact had transpired in nature.
They gave such a solid meaning that
as they struck the ground. All summer
have I been been preparing for this one
moment the most sudden of all the
acts connected with the growth of the
future tree, and I felt as I knelt
below the parent branches & examined the
nut, that the night well explain
All its care, all its solid maturing to
be nothing but ^{destiny} by one stroke of my boulder
an end - no more. But I am thankful
to kind nature & the walnut tree, &
do not pass by unmindful that I
owe so much to those great round nuts
that it be.

When I see one in the valley

apple, I felt it shake slightly, & looking about
saw a fine grey squirrel sitting only one foot
length away. Its tail was vibrating rapidly,
& it was evidently much displeased that I
should ^{be} sitting on the "squirrel high way". After
some time it got up ~~and~~ on a dogwood tree
& sat on a branch waiting for me to
go on, but time of this, it slipped back
along the fence and into a large stump.
Then I went to look for it, it was
at night in the branches. Some grey squirrels
are very cautious indeed, & I am sorry to
see how others almost hop into a
gunners' bag.

Sunday Oct 7. My companion & I went to
the country in the vicinity of Potoman's
Pt today, many of the fields & patches
of wood land were having
bees in bloom. On quite a high
sandy hill about east of the old
Potoman house, we found some Indian
signs, for arrow heads and an
awl. We got them in quite a small
area, perhaps ten or fifteen square yards. The
awl was my find. It is the first one that
we have so far found and it is
quite perfect. There are many very
old apple trees in the vicinity but

Indian signs

1887

only found on the western side. The
view when the road ^{is} reached (Kings
Bayou Ar.) was charming, the upland in
places being somewhat high with an abrupt
descent to the low land.

Mr King called on Kinney, the man who lives
in the oyster shell house, for a drink of water,
He gave us for the society a shell paper
stone [] with two holes in it. We had a long
talk with the expediter on the political
state of the Island, about the proposed rail
roads that will cut up this portion in
particular, the dead Indians & the present
aspect of the place.

On a large sand dune, in the salt-
meadow, we ate lunch, the dune being
wooded & containing a little valley with
a swamp. Far out on a desolate piece
of young growth, we discerned the first
hemlock tree that has been found growing
wild on B. I. It was the occasion
of great rejoicing and we will make
pilgrimages there in the future. The
tree is about 25 in. in diameter.

I saw Junco canina for the first time
in several years. It was flying in a barren
field. Sphæropus collaris was plentiful
on the sand dunes in the same place.

Saturday October 15th. The past two or three.

On the ~~weather~~ nights have been cold and they have left their
 this autumn mark on nature, most of the ^{part} butterflies being
 gone & many trees have lost the ^{part} green of their
 leaves. This is not so mild an autumn as
 last, when I heard a cicada note in this
 month, on the 3rd inst.

Cicadae
 Oct 3-1886

The wind has been from the north and
 north east all day, but it has been ^{beautiful} clear, and even hot in some sheltered
 places on which the sun shone. I
 visited the same fields & bits of wood land
 as I did last Sunday, & picked

(found here) a new perfect hunting arrow heads
 on the same little hill when I
 found the others. A great number
 of yellow-rumped warblers were about,
 literally hundreds, I ^{never} having seen so many
 of them together before. A few cherries
 & cat birds still remain, and I saw
 one wood thrush. Hermit-thrushes
 are now. A great many boys are
 shooting at the birds with bean shooting,
 & I saw a song sparrow & a cat bird
 that had been injured, & could
 fly a short distance. I think these
 have been injured by the ^{bean} shooting.

Yellow-rumped

warblers.

Cherries

Cat birds

Wood thrush

Hermit thrush

Birds & bean

shooters.

The song of

was accompanied by a companion, & wonder if it
will stay with its crippled friends through all
our winter?

Along the ~~side~~ along that ~~moving~~ where the wood
where are a land & the salt meadow meet. Then
right ~~near~~ ~~the~~ ~~land~~ ~~to~~ ~~the~~ ~~meadow~~ ~~the~~ ~~land~~

high you may see, bugging close to the wood
and if one ~~is~~ ~~seen~~ ~~at~~ ~~the~~ ~~edge~~ ~~of~~ ~~the~~ ~~wood~~
it does not suggest any such state as we.

There is ~~the~~ ~~light~~ ~~rooming~~ ~~is~~ ~~always~~ ~~going~~ ~~on~~, the
has ~~in~~ ~~the~~ ~~room~~ ~~is~~ ~~extreme~~ ~~some~~ ~~more~~ ~~or~~ ~~less~~ ~~than~~
it is ~~in~~ ~~the~~ ~~room~~, ~~burning~~ ~~on~~, it is ~~so~~ ~~broken~~
of ~~some~~ ~~up~~ ~~some~~ ~~undiscovered~~ ~~views~~ that I
always ~~remember~~ ~~it~~ ~~with~~ ~~pleasure~~

Orchelimum I heard a single specimen of *Orchelimum*
Melamples vulgaris stridulating, & I find that *Melamples*
leucis rubrum ~~leucis~~ ~~rubrum~~ can run backward, down a
grass stem quite fast indeed.

Not only the larvae of lady bugs eat
plant lice, but I saw a perfect
Urtica bipunctata eating one today.

I caught a ribbon snake for Mr. W. B. of
Ribbon snake I did, who desired me to ~~send~~ ~~it~~ ~~to~~ ~~him~~ ~~to~~ ~~look~~ ~~over~~ ~~a~~ ~~half~~
& examine bottle ~~him~~ ~~for~~ ~~it~~ ~~to~~ ~~die~~ ~~or~~ ~~at~~ ~~least~~ ~~become~~ ~~torpid~~,
in a cyanide bottle. I was ~~at~~ ~~the~~ ~~point~~ ~~of~~
letting it go several times as I hardly
killed the idea of making it & see shine
stronger for ever more.

Sunday, Oct 16. This morning I took the R.R.
to Clifton & walked through the meadows to Newell.
When I was near Garretts, I was looking at a
clump of *Helenium*, noticing how in many of
the flowers ^{the petals} fell off leaving the central heads only
when in my vaguery I fell into a creek
getting wet up to my knees. I wished my
shoes were not so water tight - then, for they
might have been a little ^{softer} it was.

In one of the little patches of wood land
that skirt the meadow, I discovered two nests built
by *Hesperomys*. The opening or door was in
each was on the south east side, and one
of the nests was built in a most conspicuous
place by the path. A crow could have easily
got at it & its owner, that ran out when
disturbed. I neglected to make a very careful
inspection, but I think that the mouse made
the nest itself - that it was an old
bird over - ^{over} in this same patch of woods
I found a garter snake & a land turtle ^{near}
together, perhaps enjoying each others company.
The turtle had yellow eyes faint red on
the border, green on the snout.

I called at Dr. Williams' about one o'clock after
eating my lunch in a sunny spot, where I
disturbed what I take to have been a whip-poor-will.
It flew a few feet & settled down under the

hatched & when I followed it up the same water
of flight - was missed. Mrs Britton, the Dr & I (& the dog)
went out on the beach. There was a great
many gulls & the little frisky dog was run-
happily in running along the sand basking
at a gull a quarter of a mile away over
the water. Sometimes he ran out with
the water, in order to get near it.

Bitter Lake

Britton caught a better fish than a pretty
fish it was with a fancy dorsal fin & white
scales. He dived him all over very carefully.
There was a few more still swimming
of a recent kind, with a little more I
had a large fin started, for the
day was not over warm

Cal bird

I saw one cal bird a brown thrush & great
brown thrush. It was a lot rumped warblers. In the
field we were in this morning, I saw some of these
brown ones was there & a few brown creepers. The
yellow-rumped warbler, yellow rumped, has a habit of being out-
sitting in trees & catching insects, in the
same way as the same do.

Embryos odora

Dr Britton captured a specimen of
Embryos odora in the house about the end
of September, and gave it to me yesterday
for the Association. It is quite fresh
looking and perfect. The two that I have
taken were captured in July, one was third & the other
the 10th of the month.

October 22. I have a small Rana
Rana clamitans in an aquarium with a
number of insects and the alligator. Tonight
I heard a disturbance as if an injustice
was being perpetrated upon some of the
weaker members of my family, and
an inspection revealed the fact that
Rana was trying to swallow a beetle.
The beetle was entirely out of sight
when I first looked, & every little while
it came & could have the frog
batty open mouth, that I think was
produced by the insect. Gradually
the end of the elytra appeared & finally
the whole creature, for foggy discerned
that Tropisternus, with its sharp ventral
spine, was not a choice morsel, and
so it was restored to its former

Sunday, October 23rd 1887 To Annadale
Station & back to the city. I was particularly
anxious to make out the differences between
some of the ^{numerous} kinds of
sparrows or buntings that are
common at this season, & in a measure met
with success. I saw a sparrow hawk make
an effort to seize a robin, which got
away after much ~~struggle~~. I ^{also} saw a
couple of wrens, I think the common species of
~~Rana~~ ~~wren~~

Benedict
Farm

I visited the same large orchard bordering
of the salt meadow that I walked through
in the autumn of '84. ~~And~~ And
as then, the ground was strewn with apples,
so that I had to step with care lest
I miss them under my feet. There was
about five or six kinds represented, several
unusual. The foundation of an old
house stands on a little rise in the
land close on to the meadow, & near
one of the walls there is a large-
buttressed wood tree, measuring about 14 ft. 3 in.
round. It is the largest one of the kind
that I saw. A little north of this
tree there is a burial burying ground - where
many members of the Morgan family are
interred; & I also saw a stone to a LaFayette
who died in 1845. I will copy the inscriptions
some day. This locality is notable for
its large trees. I know of three or four
quite large white & chestnut oaks in the vicinity.
One ~~was~~ measured, standing by a quiet old
road - surrounded by smaller trees, was
11 ft., 6 in. in circumference, and its trunk
was large around for many feet up. Another
^{oak} to the ^{south} east of the burying ground (which contained
a large red maple, evidently planted) is 18 ft., 2 in.
in circumference, spreading into several large branches
about 15 feet from the ground.

See page
1094

Also visited the old house on the
Horse and found large sand dune where I called ^{the} last
dune at south time I was near. The only way to
reach this dune is to cross the meadow
on a road constructed for the purpose, for
in days gone by there was a small pottery
factory there ^{to which the road led}. Now only the old farm
house is left, which contained a frieze
of wonderful nationality. There are many
fine cedar trees, several ^{which} willows ~~(which)~~ and
a silver poplar. With all its little hills
& dales, I should think this dune contains
fifteen acres & the highest ground to be
about twenty feet above the meadow land.
There are a few signs of an Indian settlement
or at least of an encampment - for the
absence of all fresh water - probably for miles
or permanent residence. However I found
~~the~~ pieces of pottery that had fallen out
from the roots of a cedar tree on the
bank - & on one of the two highest
hillocks I found a very good hammer
stone. What scenes & associations these imply
& the broken pottery & oyster shells, on the old
sand dune, stand before us, and the old
farm house is not without its interest ^{too} for
many things happened there.

Habitat

Coming across a field I frightened two

rabbits; the bed of one of them that I found, was a well worn spot - in the high grass & looked as if it had been used - for the sun - but - The only one I saw 'a short distance at first; & then started to look - but - when once thoroughly aroused - its white tail went bounding over the hill.

Chickens hiding
in the grass

There were a few chickens in the field & when frightened by my approach, they hid away just as the rabbits did, as if they had learned the secret from them. It was very comical to see one young rooster crawl in among the tangled grass & remain perfectly still with only his bright reddish eye twinkling. Their actions were so strange at first that I thought there were ^{for they usually fly them in the grass} more rabbits. I have never seen chickens act thus was before, but never more so slightly disturbed.

Butterflies

A few butterflies were flying, such as Graphis, Colias & Francis, and the usual number of grasshoppers. I should have mentioned also that in a hole among the roots of the cedar, when the light came, was a fresh looking specimen of Thomomys edwardsi. It was hardly time for it to be hibernating, for they were still flying in the air & the ground was warm.

Oct 31 '87 I visited Mr. Steno upon invitation
on Friday evening, & Saturday we & a Mr. Martin
went to Chatham, near the "Great swamp".

We first went out of the village in the opposite
direction from the swamp, to call on a Mr.
Dickinson a taxidermist & found him in
his work room engaged in skinning a vol.
The house is on a little rise in the land,
most of the surrounding country being swampy,
& the Passaic river running near by. Still hickory
hickory nut trees ~~were~~ very common, I saw few
other species ^{of hickory} and it seemed to
be a favorable place for

birds. Red headed woodpeckers were common on
the river banks & we saw many flocks of white
throated sparrows & yellow birds. Red squirrels
were picking up the hickory nuts & as we came
by one tried to get into a hole in a hickory
tree but was too large & finally ^{it} ran away upon
our nearer approach.

There are marks on the trees in the
land, showing where the water has stood
in former times & the country must be
almost a land in such occasions. Mr.
Dickinson has some traps where he
catches many fish after the flood
subsides & he lets the water ^{from inland} back into
the river, the fish being forced into wire cages.

He is at... a farmer, but says stuffing
birds pays him just as well as tilling the
soil. He showed us all the specimens that
he has made usually clutter up such a shop. There being many
little partridges that were hatched under a tree
& also some young screech owls. He makes

specialty of stuffing young birds, & hatches many
little wild ducks, quail & under the
wood ducks little wood ducks though becoming somewhat tame,
yet are very suspicious, & show a sudden movement
at the hand and are quite unlike

the domestic ones. The Carolina wrens
some times build along the river, but fish
wrens are common. There were some pileated

wood peckers about the river, and I understood
him to say that they also occurred ^{occasionally} on

his farm. The Canada goose is of rare

occurrence though not an uncommon bird about
Newark, while the rose breasted goose is

some times seen. One killed itself by flying
in the lane on Mr Martin's place at South
Orange this ^{past} summer.

Great Swamps. Going back through Chatham village, we
visited the "Great Swamps," several miles
beyond. Of course we could only go in a
little way. Keeping to the river & trail,
saw but a very little of it. It is a
grand place for one would expect to see

Mr. Bailey

point projected on the under side. It had
probably flown against some hard surface.
We visited Mr. Bailey, (Mr. Martin introducing
us) who is a ornithologist but has
lately taken up Coleoptera. We had a long
talk on bird nests & feathers and among
some of the things he showed us
of the N.S. specimens that had in
some way found their way to
New York. The warblers, or the

Water Thrush

others, were in the same series. This specimen
No. 47. Today, the 11th at least - I have seen

Vanessa californica

an egg of *Vanessa* and open on a fence under a
hollow log. This is probably a throat brood.

Sunday May 6. Dr. Buxton & I went out at long
morning & pleasant.

Plethodon

In some cases I find that *Somogyathus Plethodon*
erythronotus forms sort of a cell under the
stone when it prepares to hibernation, or indeed
it may be that it finds its way into
a cell made by some other animal.

Cheridonia

A single specimen of *Cheridonia americana*
americana was frightened from its resting place on the
ground, and after two short flights lit high
up in a tree. With the aid of a long stick
I got it to ^{again} alight, vainly trying to produce
the same effect with stones thrown against
the tree ^{near} to when it was resting. When

reached the ground it ~~seemed~~ to hide under one of the numerous leaves, at least it made no effort to fly when approached. I captured it for ~~Bentley~~ ~~the~~ a few specimens of Encystolophus sordida & Chimanocephala viridifasciata were abroad, & many Melanophus formicivorus. There were also some grasshopper larvae of Aphidius sulphurea & C. viridifasciata.

Habitat.

One male jumped out of the grass as I walked along. It is pleasing to know that our populated island still contains some birds.

Election Day, Nov 8. The Torrey Botanical Club and the Nat. Sci. Association went on an excursion, getting off of the cars at Owl House station. As was to be expected on such a morn'g I did not see many of the birds &c. but we had nevertheless a very good time.

Hemidactylus scutellatus, this bird are I have found in several years. Under a piece of tree stump I found a Canis antelope ~~buried~~ ~~away~~ ~~for~~ ~~winter~~ ~~hiding~~ ~~place~~. At five o'clock when it was yet quite light I saw ^{some species of} ~~this~~ large bat (Atalapha cinerea), that was presented at a meeting of the U.S.A. in Nov 1885, having been shot on the Island. They are evidently migratory. What might I not see if I lived nearer to a bit of wilderness?

1897

Saturday, Nov 12. I rambled along Seattle beach this morning, & afterward, as the wind blew very hard, up onto the hills, where it was more sheltered.

The hermit on the beach

The hermit, who built a house on the sand point near the bridge, still lives there, & has added two more little structures, all made out of bits of lumber picked up on the shore. When he can get it, he covers them with old tin roofing, thus making quite a tight abode.

Many rags were cast up on the beach, & I saw two gunners shoot some beautiful water birds, with light cannoner backs & black & white tail feathers;

The boulevard along the beach, is now hardly a path in some places, so much has been washed away, & the bridge is falling rapidly to ruin.

A kind black dog came shyly up to be kind me, as I walked toward the upland - & rubbed his nose against my hand. He fairly smiled when I turned around, & we had a pleasant conversation.

Stamps in the

In a sheltered spot I found one of the actors still in flower in the mountains.

... . On Tuesday last I saw several
composites & Gentiana

Up in a chestnut tree, near the highest
point - there was a dead hawk caught in
the branches, & under the tree I found
another one.

On top of a stump there was an
skinner of *Blarina brevicauda*, that an
owl had captured, but had only eaten
the brains.

Sunday Nov 20. I rambled out to Richmond
but in all my fourteen miles walk I did
not see a great deal, for it was a bleak day.
A few bright colored leaves are still in
the black berry bushes, & in some protected
ditches I discovered a few flowers in
blossom, particularly a ^{wild} carnation with both white & pink.

Nut hatch
I noticed a nut hatch ^{hatching} ~~giving~~ at a nut, that
it had laid on a large fungus growth
up in a tree, using the fungus as a
sort of table. I stopped to watch
it, & the nut hatch also stopped to
look at me. After a time, considering
me harmless, it came around to the
side of the tree, & regarded me
again for a little while, ^{but finally} went into a
hole & promptly reappeared with a nut.
This it ~~took in its mouth~~ ^{placed}

beside the other ones. After picking at them
nuts for a time, it would run up
the tree a little way & then back again
as if for exercise, but always returning
to the nuts again. I had watched
it for a long time & was getting tired
cold, when coming around to the
hole again, the bird regarded me
very attentively, being evidently afraid to
go in while I was so close. However,
after several starts, it finally disappeared
& in due time brought out another
nut. As it went up to the top of
the tree shortly after, I thought it
must be no harm to knock the nuts
off of the fungus growth, which I did
without disturbing the latter. I found
that the had been eaten by a
squirrel, one of them still having
some of the meat left in it, showing
the marks of the nut-batcher's bill.

Evening Day, Nov 24 ¹⁸⁶⁷ The sun didn't
shine any today but it was not cold.
Some of the air turned somewhat off color, yet as one of the friends in a shed
I heard a cricket singing & also a "piper",
when I was
near the highest point. Along the
road I found a black snake, that some
one had killed, & when I stood upright the
tail just came to my knee.

back behind the ground. When I get home
I measured & found that this air
was about 100 feet. There were many
of them & I got them all in a box & when
I would come around in the hopes of
see some of them away from some inhospitable
place. "Robins, go to Jersey" I shouted, but
they only flew to the next nest. They
were not nervous enough to be frightened, for
in the dense yards & orchards, where they were
born they had seen many such as I, who
did them no harm. A man comes
along the road & sees a cold ^{black} snake that
has come out to warm himself in the last
rays of autumn's waning sun, when for no good
reason that even he can give, he puts his foot
on it or kills it with a stick, for he is
generally afraid to go very near. He tells his
family, may be, that he killed a big snake
& they are glad. In the evening he
attends a lecture union meeting, & says
capitalists are exterminating him & he
should go to the end of the line,
forgetting how he ^{himself} kills so many things
himself. It is unkind to cats & dogs simply
for the pleasure of giving him.

I stationed myself near a little pool in
a thicket to watch this old man, & soon

Chicadees

they came close up to me. As I kept very
quiet. Several were less than a yard away
one taking a bath in the water at my
feet - & in passing a dead leaf out of a
crotch in the tree I threw away with it.

Yellow-rumped. There were also several yellow-rumped warblers
purple. & a song sparrow in the flock.
I thought I saw two moths (noctuid) that
I had never seen before.

Cardinal. The cardinal was in the vadsworth
the afternoon. I saw one thing about in the b.
at 7.56 "H" per station. The day being warm. I was 150
in the sun. I saw one in the middle of the
lawn. It was when watching insects -
I think will see that the cardinal was in the
lawn. Once or twice it came close to me
& I could distinguish its color distinctly when
it turned in its upward flight. I am
quite sure that it was the cardinal.

Melanophaga. Female Melanophaga seems to return
from the north. Does they ever return?
seen in the same way.

Cardinalis. The cardinal was in the flock & I
saw a song sparrow sing a portion of its song
under No 2. This was a very soft note than
yesterday even the insects being
out in numbers. On Ward's Pt at Potomac
I saw what I take to have been a monarch

1924
butterfly, but before I could get over the
bitter fence and after it, it was
Poliotes. gone, so I am not sure. Wasps & a
Euclyptus. The bees were also abroad, & Euclyptus
Chryseus. Cophia & Melanopterus fennellianus (♂ & ♀) were
seen in some numbers. I captured a ♂
specimen of Arenaria americana, the
second individual I have seen this year.
Chryseus. Peepers (Hyala pickeringii) were in full song,
as on an April day.

Many moths were on the persimmons
under the trees, & I saw a snow bird
try to catch one. I find the fruit
of the cactus, the prickly pear, quite good
at this season. I ate several of them.
It is best to turn them inside out &
only eat that part just under the skin.
How many good fruits there are, fruits
that nature ^{must} should be eaten, for all
this our met the cactus plant has been
saving up its sweets for some bird or beast.
I was as kind to it as I knew how to be
& ^{threw} the seeds to the ground a quarter of
a mile away from where they grew, but
perhaps it was stony ground & they will not
grow.

In the woods I found many oyster shells &
also looking about a little, discarded oyster shells.

Nov 20 The snapping turtle, the 1st one
snapping turtle, for a little over two years, died a few
days ago.

Nov 21 The snapping turtle, the 1st one, died a few
days ago.

Nov 22 The snapping turtle, the 1st one, died a few
days ago.

Nov 23 The snapping turtle, the 1st one, died a few
days ago.

Nov 24 The snapping turtle, the 1st one, died a few
days ago.

Nov 25 The snapping turtle, the 1st one, died a few
days ago.

Nov 26 The snapping turtle, the 1st one, died a few
days ago.

Nov 27 The snapping turtle, the 1st one, died a few
days ago.

Nov 28 The snapping turtle, the 1st one, died a few
days ago.

Nov 29 The snapping turtle, the 1st one, died a few
days ago.

Nov 30 The snapping turtle, the 1st one, died a few
days ago.

Dec 1 The snapping turtle, the 1st one, died a few
days ago.

Dec 2 The snapping turtle, the 1st one, died a few
days ago.

Dec 3 The snapping turtle, the 1st one, died a few
days ago.

... I saw
"a" ... Blackbird was flying.
... I notice
Hyla that they are often high up on the hill
side. ... hibernates in some

I also heard one of the other frogs croaking
but could not discover the species. Not
was to be seen, & it was interesting
to get close up to the cross in the
fog & under cover of the trees. I sat under
some little pitch pines, but was discovered
by a crow that lit in a tree near by.
It kept its beak & cawed at me for a
quarter of an hour.

December 1st. Last night I saw a ♀ lamp beetle
(yellow worms) shining brightly in the grass, so mild
is the weather.

Some days ago, when I went out in the morning
to feed the chickens, I saw a cardinal
on one of the pear trees. It whistled loudly
& was extremely shy. This is the first one
I have ever seen in the garden.

Sunday, December 1st. Last night the wind
blew hard & the snow fell fast, so that
when I looked out this morning the
ground was white. While I was showing
a path to the chicken house I heard
the ^(mentioned on the 1st) ...

resides in Mrs. Hagedorn's hedge.
I walked out as usual today.

While I was reading the Wabash nights in
an old shed at lunch time, I saw one
in the shipping about on the snow which
I captured. I put it in a tooth pick
stopping up the ends with chewed paper
& so brought it home safely. It appears
to be the Boreus trialis of Fitch
this author, her being reproduced in Lindner's
2nd report.

Boreus
trialis

Great heron

I saw a blue heron pursued
a crow & the bird was about to light
on the margin of a pond near
where I was standing when seeing
me it flew away, but it took it
some time to get its long legs
out of sight. This was near
highest point of S. I.

There was also a very black hooded
hawk in the vicinity, with the central
portions of the under side of its
lighter. It being high ^{in the air} I
only see the under surface.

The frozen apples are still good. As I
knocked them off of the tree they came
in the soft snow, & I would look for
the holes & then dig for the

Monday, Dec. 6, 1887. In the last two days I have been out much more than I have been in a while; it has been quite warm. On the 6th only a rabbit & two snow birds greeted me as I walked over the snow-covered ground. On a fir-tree were two *Callosamia promethea* cocoons & on an elm I found one made by the same species of insect also. A cocoon of *Ptelea polydorus*.

Yesterday I walked along the beach to New Drop & back again. There were quite a number of shells cast up, I saw many specimens of *Parvula lineata*. There were also some *Perrans*.

About the last week in Nov. my singing mouse has now young, this being the third brood since Nov. 1886. As on former occasions she sang more constantly just before & after their birth. The young are now quite well grown.

December 31st 1887. The past year was remarkable for a few things, particularly for its long summer, the grass being as green as it usually is in June through the entire season. We also had much rain in the spring with fine large growth for 1887.

Callosamia
promethea
Ptelea

Singing mouse

A wet

Trumaineville

NEW YORK, State B. Oct 25th 1887

Dear Mr. Emerton,

I should have sent you the spider I spoke of long ago, but all my spare time has been spent in nailing the "beasts" out of doors, until now.

On Good Friday, April 8/87 I made the following note: "A number of spiders were running about & when they came to a dead leaf, in the proper position, they would strike their palps rapidly against it, producing quite a noise, then by. I could not see that they attracted one another. My eyes were often within a foot of the operating spider so I could see quite well, and the sun was shining brightly at the time."

I quote from a clipping: "John Thoms says, in his 'Pebacoli' that on one sunny April day his attention was attracted by ~~little spiders that were running over~~ a soft, uncertain purring sound made by little spiders that were running over door sills."

Kindly tell me the sex of this spider, & any thing else you will; & if you have no objections I will incorporate the information in a note for our N.S.A. Proceedings for we are in need of such things often times.

Lycosa Kochii ♂ Sincerely,
W. J. Davis.

1887
Poughkeepsie, Staten I. Oct. 25th 1887

Mr. Amos N. Butler;

Dear Sir,

Your letter of Oct. 11th received, & it reminded me of a sort of a promise I had made, & only partly fulfilled. The next time I went afield, ^{therefore} I captured the ribbon snake ^{which} I send with this. I have also put in the box a Spelerpes ruber (about one half grown) which I found under some stones, near in the mud - by a cow wallowing on it. They however, generally occur when there is a little more water, if not in the spring proper, or under a stone in the brook. I have also found them often under boards laying on the edge of the brook & partly in the water. I had a little painted letter for you, but I forgot to send the alcohol in it & it spoiled. I feel very sorry for the snakes generally when I put them in alcohol, though I know very well you would make good use of them.

Return me any thing you like for the specimens (you have a list of those ^{of tigers & apes} I am acquainted with), or if you have any native grasshoppers or other Orthoptera ^{in good condition} I should like them instead of vertebrates. They need to be carefully packed.

Hoping they reach you in good condition, I am,

Sincerely,

W. J. Davis

9. Science for Aug 5, D. J. H. queries concerning the reappearance of mosquitoes on Staten Island some days after a storm. Though I have made some notes from time to time in reference to this, this fact has never been observed. Storms are always disastrous to insect life, especially in the present state, and will kill or blow away moths and butterflies as well as mosquitoes, but that these latter insects should reappear in numbers some days after a storm, will depend entirely upon whether the majority of the insects have reached maturity or not at that time.

Mosquitoes are present in numbers all summer on the salt meadows, indeed I have scooped with my two hands together, hundreds off their larvae from the little pools, but it is only at intervals of about a month that they swarm on the upland. During the latter week in May or first week in June and the first days of July and August; ~~and again in September~~, I have noted swarms of mosquitoes, in past years. The worst visitation of all is likely to be the July one, or at least it has been generally so. ~~in the past~~. On low ground and near the meadows, I have seen horses in July dressed ~~up~~ in garments made for the occasion & others decked with a profusion of wild indigo, that shook violently as they trotted along.

The older residents remember well the mosquito visitation of July 3rd 1862, when the vegetables were left unpicked in the garden for a week & people wore mosquito nets over their hats.

1872 was quite a mosquito-year; we remember it well in the family because my grand father was ill that summer. 1882 was also quite a mosquito year, as we remember, & as a farmer told me a few days past.

In the note on the previous page the year should have been given as 1863 instead of '62 & I have since heard some further particulars concerning that visitation. The man with a net for his head was going to the ^{steam} boat with another not so protected, when the latter became so itching that he had to be led home by his companion. The corns in some rooms were so covered by mosquitoes that they appeared black or brown & after about the third or fourth day they commenced to die, & were swept up in numbers on the floor.

See Vol. 1, p. 10, line 10, column 11 & 12,

1864 to 1872

1873 to 1882

Aug 2-28, 1864

"An Expulsion of Sparrows" - It was
wholly a flock of "White-bellied" -
that W. A. G. saw circling about his
house on Staten Island, but they in
no way caused the disappearance of
the Sparrows as intimated. These swallows
are seen every day in great numbers, flying
in long lines, and along the shore
between the shore & business houses,
and in many places may be
seen flying south along our shore line.

As to the Eng. Sparrows, ^{a few still remain about the houses but} this is their
season of flocking, and in some fields
especially when grain has been sown,
they abound. I once knew of a small
row of elms where these birds congregated

in great convention until the sun went
down. They were gathered in a large
circle of country and I think that W. A. G.
will find a similar meeting place, where
the winter sparrows will be assembled.

Tam, Kinsville, Staten I., Aug 29-'87

Wm T. Davis

Printed in the Sept. 1887

I sent Mr. Scudder two specimens of this genus & they came back identified as E. minus & E. minus slender form, just as you again identified them for me in 1885 (numbered 1 & 2, you have the specimens). I was, however, quite certain that they were distinct & so looked after them carefully. In Jan last I again sent them to Mr. Scudder, giving my reasons for considering them separate species. They were marked No 4 & 5 & he replied as follows: - "but 4 & 5 are I think distinct", though not separated in my collection. Your reasons are valid, but which should be called minus & whether the other has been separated & named (as is probable, since half dozen E. cauthus species having been described from U.S.) I cannot now determine for want of time. You have, perhaps, some literature on the subject & could find this matter out. I and the "black-legged" E. cauthus in the box will send the other forms if you desire them. When does E. latifrons come in? Our Blatin Island species may be separated as follows. (See paper attached)

If you can make any clearing up of this matter I would be very glad to hear of it so that I can at least give my forms names.

No 4 I take to be Sphragmenus balticatus ♂, & No 5 I found nearly & thought it might be a ♀ in the pupa state. However, the full grown ♀ don't look much like it. No 7 I take to be Pectis onala, but No 8 I think is distinct;

O. cauthus bipunctatus.

O. cauthus minus. On the under side of each antenna there are two raised brownish spots, one on the basal joint and one on the second joint. Broadest portion of the fore wing, 7 m. m. The same whole C shaped nerve surrounding the shrilling organ is more angular than in the next two species, that is comes nearest to an L than in the others. Stridulation, pulsating or throbbing in sound.

O. cauthus sp.? - Much more slender than O. minus, the broadest portion of the fore wings being 5 m. m. The nerve ^{or vein} surrounding the shrilling organ is more C shaped than in O. minus ~~or~~ not so angular. Stridulation faint, but not pulsating, and kept up but a ~~short~~ ^{few} moments at any one time.

O. cauthus - sp.? Often with partially black body, legs and antennae, and a median, dorsal, thoracic stripe of the same color. Each antenna has four raised blackish spots at base, two on the first joint, the inner one being much the fainter and two on the second joint. These spots can only be ^{seen} in the ^{higher} ^{evening} ^{specimens}. The C shaped nerve of the same ~~form~~ ^{shape} as in the preceding slender O. cauthus. Stridulation not-pulsating, but kept up in a ^{loud} continuous strain for quite long periods.

observe the setting of the eyes,
I have been searching for Orchelimum agile &
some related forms. Perhaps No 11 is O.
vulgare, but the tegmina is very short &
pointed. No 12 may be the same, but in the
case the second pair of wings are the longest
whereas in No 11 it is the reverse.

No 13, may be L. fasciatum, but is rather
large. I have some males just as big, that
evidently belong to the same species.

Very truly,
W. F. Davis

